

National Fire Incident Reporting System

Complete Reference Guide

January 2015



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FOREWORD

In 1972, the President's Commission on Fire Prevention and Control published *America Burning*. This document was the first in-depth discussion of this country's fire problem. An outgrowth of *America Burning* was the National Fire Prevention and Control Act, Public Law 93—498, which established the National Fire Prevention and Control Administration.

One of the results of the P.L. 93–498 mandate to collect national data on fires was the establishment of the National Fire Incident Reporting System (NFIRS). In 1976, six States piloted what eventually evolved into NFIRS. The U.S. Fire Administration (USFA), a component of the Department of Homeland Security (DHS), developed NFIRS as a means of assessing the nature and scope of the fire problem in the United States.

NFIRS has grown in both participation and use. Over the life of the system, all 50 States, more than 40 major metropolitan areas, and more than 15,000 fire departments have participated in NFIRS. On a yearly basis, approximately 600,000 fire incidents and more than 5 million non-fire incidents are added to the database. NFIRS is the world's largest collection of incidents to which fire departments respond.

NFIRS data are used at all levels of government. At the local level, incident and casualty information is used for setting priorities and targeting resources. The data now being collected are particularly useful for designing fire prevention and educational programs and emergency medical service (EMS)-related activities specifically suited to the real emergency problems the local community faces.

On the State level, NFIRS is used in many capacities. One valuable contribution is that NFIRS data are used by State legislatures to justify budgets and to pass important bills on fire-related issues such as sprinklers, fireworks, and arson.

Many Federal agencies, in addition to USFA, make use of NFIRS data—the Consumer Product Safety Commission (CPSC), the National Highway Traffic Safety Administration (NHTSA), the National Institute of Standards and Technology (NIST), to name a few. The CPSC has found NFIRS very useful in identifying potentially hazardous products.

Nationally, NFIRS is used by various private industries, including national associations for home appliance product manufacturers, the hotel and motel industry, insurance companies, and attorneys.

Because NFIRS is a voluntary system, not all States or fire departments within States participate. In 1977, only 6 States regularly reported data to the National Fire Data Center (NFDC), and 19 others had data systems in some stage of development. Since then, participation has increased significantly so that an estimated 44 percent of all U.S. fires to which fire departments respond are captured in NFIRS.

States have the flexibility to adapt their state reporting systems to their specific needs, and reporting by localities is voluntary. Therefore, the design of a state's data collection system varies from state to state. However, NFIRS was designed so that data from state systems can be converted to a single format that is used at the national level to aggregate and store NFIRS data.

FOREWORD

As participation in NFIRS increased, the system itself has undergone revisions and updates. The latest update of the system is Version 5.0, which provides many improvements both from the standpoint of those who submit the data and for those who use it. This reference guide provides step-by-step instructions for submitting fire incident information to NFIRS 5.0.

Comments and suggestions on further improvements to this guide are solicited and should be submitted to National Fire Data Center, U.S. Fire Administration, Department of Homeland Security, 16825 South Seton Avenue, Emmitsburg, Maryland 21727. Comments can also be made on line on the USFA Web form at http://www.usfa.fema.gov/

Chapter 1

INTRODUCTION

Chapter 1 • Introduction

This reference guide is a component of the National Fire Incident Reporting System (NFIRS) Version 5.0. It provides both instructions for reporting data to NFIRS Version 5.0 and an understanding of the data elements collected by the system. It also serves as a reference for the coding of the data. NFIRS (pronounced "en-furs") is a tool that fire departments use both to report fires and other incidents to which fire departments respond and to maintain records of these incidents in a uniform manner.

NFIRS 5.0 is a modular, all-incident reporting system designed by the U.S. Fire Administration (USFA), a part of the Department of Homeland Security (DHS), with input from the fire service and other users of the data.

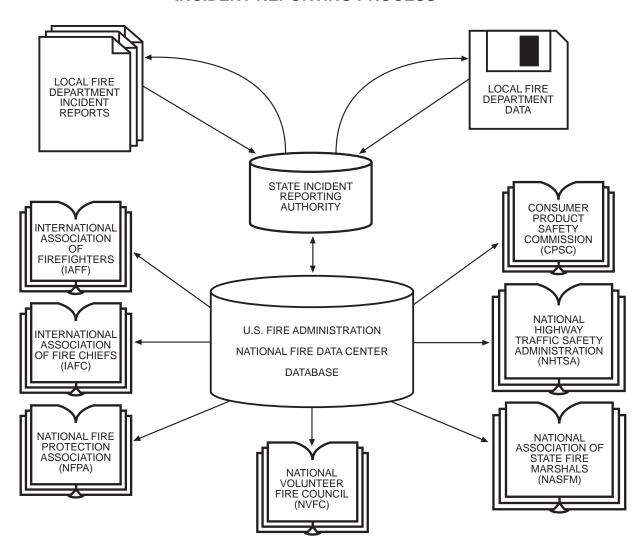
How NFIRS Works

In 2001, more than 12,000 fire departments participated in NFIRS. After responding to an incident, fire department personnel complete one or more of the NFIRS "modules." The information in these modules describes the kind of incident responded to, where it occurred, the resources used to mitigate it, and how losses and other information designed specifically to understand the nature and causes of fire, hazardous material (HazMat), and emergency medical service (EMS) incidents. Information is also collected on the number of civilian or firefighter casualties and an estimate of property loss. The uniformity of definitions used in coding NFIRS fields makes aggregation of national data possible.

Information is entered about an emergency response either manually on a form or directly through a computer. Local agencies forward the completed NFIRS modules to the State agency responsible for NFIRS data. The State agency combines the information with data from other fire departments into a statewide database and then transmits the data to the National Fire Data Center (NFDC) at the USFA. The NFDC can then compare and contrast statistics from States and large metropolitan departments to develop national public education campaigns, make recommendations for national codes and standards, guide allocation of Federal funds, determine consumer product failures, identify the focus for research efforts, and support Federal legislation. NFIRS is the primary source of data for a wide range of analyses and reports, including USFA's publication Fire in the United States, which is the single most comprehensive reference on the nature and scope of the fire problem in the United States.

At the national level, data combined from participating States are also used by information partners, as shown in the following graphic.

INCIDENT REPORTING PROCESS



NFIRS Version 5.0 Enhancements

NFIRS 5.0 is an information-based system with data entry, data storage, and data retrieval, whether for a single incident or in aggregate, aggregated via a computer that interacts with the database. Because not all fire departments use computers for their recordkeeping, paper forms are available. Paper forms are forwarded to a central point where the data are entered to a database. This guide provides detailed instructions for completing paper forms. Automated reporting systems, however, should be designed to capture the data in the same order as these paper forms, so this guide is relevant to anyone who must collect and report incident data.

In Version 5.0, a series of descriptions with assigned code numbers is used to describe incidents. Many of these descriptive phrases were created by the National Fire Protection Association (NFPA) and published in NFPA 901, Standard Classifications for Incident Reporting and Fire Protection Data, 1995 edition. Appropriate codes are included in this user guide. Many improvements that have been incorporated into Version 5.0 are the result of suggestions made by participating fire departments, State agencies, and the National Fire Information Council (NFIC).

The type and content of data collected by NFIRS 5.0 have evolved over more than 25 years and are based on the participation of all 50 States and more than 40 metropolitan fire departments. NFIRS 5.0 captures information on all incidents to which a fire department responds. In addition to many data coding improvements, Version 5.0 provides five new modules that recognize the increasingly diverse activities of fire departments today: an EMS Module, a Wildland Fire Module, an Apparatus Module, a Personnel Module, and an Arson Module. Other modules have been extensively revised.

The modular design of NFIRS 5.0 makes the system easier to use than previous NFIRS versions because it captures only the data required to profile the extent of the incident. Some fires, for example, require just basic information, whereas others require considerably more detail. The accuracy and reliability of the collected data are improved because of the way questions are asked and data are coded.

The selection of data elements and the coding selections for the data have been revised to reduce confusion or improve data quality. For example, codes using 9 to indicate "not otherwise classified" have been changed to the value of 0 (zero) where it may be necessary to code something as "other." The internal codes for "insufficient information to classify further" have been eliminated. A single code of "U" (or "UU" or "UUU" depending on field size) is available to designate "unknown" or "undetermined." Although NFIRS Version 4.1 allowed a distinction between the 9 code ("not otherwise classified") and the 0 code ("insufficient information to classify further"), the distinction between these codes was often unclear to the respondent.

Other improvements incorporated in NFIRS 5.0 include:

- Compound data elements have been eliminated. Some of the previous data elements asked for multiple pieces of information. NFIRS 5.0 splits these data elements into single-issue questions to eliminate often confusing and ambiguous or incorrect answers. Although this increased the number of fields or questions being asked, the choices are clearer and the number of codes has decreased. For example, "Equipment Involved in Ignition" in Version 4.1 is a complex list of equipment that not only identifies the equipment, but also includes data on its power source and portability. Version 5.0 has three categories (Equipment, Equipment Portability, and Equipment Power Source) that makes coding easier, more accurate, and more specific.
- Contained, no-loss fires are simply reported using only the Basic Module, with as few as three codes having to be looked up and entered when using the paper forms.
- Small spills of common hazardous materials are documented only in the Basic Module instead of requiring the fire department to complete all the details that are necessary for spills that are more significant. Detailed information is completed on the HazMat Module (NFIRS–7) if a serious release of hazardous materials occurs.
- Reporting the failures of protective clothing and equipment worn or used by firefighters has been simplified to focus only on items whose failure contributed to a casualty (i.e., injury or fatality).

For convenience to users familiar with the codes of NFIRS 4.1, references are provided in this guide to the titles of the NFIRS 4.1 code lists that have changed in NFIRS 5.0.

Benefits of NFIRS to Firefighters

Firefighters will find that NFIRS 5.0 is easier to use than previous versions. Also, two of the new modules, Apparatus and Personnel, will assist fire departments in managing apparatus, personnel, and resources.

Each fire department is responsible for planning and managing its operations so that firefighters can perform their roles of fire control and fire prevention most effectively and efficiently. The availability of accurate information about fires and other incidents is vital in achieving maximum performance. Patterns that emerge from the analysis of incident data can help departments focus on current problems, predict future problems in their communities, and measure their programs' performance.

Coding

In 1963, NFPA formed a technical committee to devise a uniform system of fire reporting to encourage fire departments to use a common set of definitions. NFPA 901, Standard Classifications for Incident Reporting and Fire Protection Data, was developed as a dictionary of fire terminology and associated numerical codes. As the fire service gained experience with this fire data "language," continuous improvements have been possible. The set of codes used in NFIRS 5.0 represents the merging of the ideas from NFPA 901 with the many suggested improvements from users of the NFIRS 4.1 coding system.

Structure of the User Guide

Chapter 2 briefly describes the 11 NFIRS modules, provides general guidance on when each module should be used, and details standard conventions that are to be used when completing these modules. Chapters 3 through 13 cover NFIRS modules 1 through 11, respectively, in detail. Guidance is provided on how each field of the module form should be completed and defines the codes that are used in the system. Chapter 14 addresses information that might be submitted on a supplemental form (NFIRS–1S). Full-size replicas of all NFIRS forms are found in Appendix A.

Appendix B is an index of NFIRS 5.0 synonyms of selected code lists that have been alphabetized. Appendix C is a glossary of terms and abbreviations. Appendix D is an alphabetized listing of chemicals and hazardous materials.

Chapter 2

NFIRS 5.0 MODULES

Chapter 2 • NFIRS 5.0 Modules

NFIRS Version 5.0 consists of 11 modules. The Basic Module is to be completed for every incident, with additional modules used as appropriate to describe the incident.

Description of Modules

The **Basic Module** (NFIRS-1) captures general information on every incident (or emergency call) to which the department responds.

THE FOLLOWING MODULES ARE USED IN CONJUNCTION WITH THE BASIC MODULE, WHICH MUST BE COMPLETED FOR EVERY INCIDENT TO WHICH YOUR DEPARTMENT RESPONDS

The **Fire Module** (NFIRS-2) is used to describe each fire incident to which the department responds. For wildland fire incidents, the Wildland Module can be used instead of the Fire Module if that option is available by your State reporting authority.

The **Structure Fire Module** (NFIRS–3) is used to describe each structure fire to which the department responds. This module is used in conjunction with the Fire Module.

The **Civilian Fire Casualty Module** (NFIRS-4) is used to report injuries or deaths to civilians or other emergency personnel (e.g., police officers, non-fire department/EMS personnel) that are related to a fire incident. This module is used in conjunction with the Fire Module and, if applicable, the Structure Fire Module. Non-fire-related injuries or deaths to civilians can be reported on the EMS Module.

The **Fire Service Casualty Module** (NFIRS–5) is used to report injuries and deaths of firefighters. The module can also be used to report the exposure of a firefighter to chemicals or biological agents at an incident where that exposure does not result in any symptoms at that time but that manifest themselves at a later date. This module may be used with any of the other modules.

THE FOLLOWING MODULES (NFIRS-6 THROUGH -11) ARE
OPTIONAL MODULES THAT ARE USED ONLY WHEN THAT OPTION(S) IS
SELECTED BY YOUR STATE REPORTING AUTHORITY

The **EMS Module** (NFIRS–6) is completed by fire departments that provide emergency medical services. The module is used to report all medical incidents where the department provided the primary patient care. This includes incidents where there were civilian fire-related casualties and a Civilian Fire Casualty Module was completed and where there were firefighter fire-related casualties and a Fire Service Casualty Module was completed. (This module does not serve as a patient care record, but it can be used in conjunction with the local requirements for patient care.)

The **Hazardous Materials Module** (NFIRS–7) is completed to report spills or releases of 55 gallons or more of hazardous materials or when special HazMat actions were taken. As appropriate, the module is used in conjunction with the Fire Module or other modules to provide detailed information about incidents involving hazardous materials.

The *Wildland Fire Module* (NFIRS–8) is completed to report incidents that involve wildland or vegetation fires. The module is used in lieu of the Fire Module for wildland fire incidents.

The *Apparatus* or *Resources Module* (NFIRS–9), a department-use module, is completed to report data specific to each piece of apparatus that responds to an incident. It includes information that can be used to calculate response time and time out of service. This module is not used if the Personnel Module is used.

The **Personnel Module** (NFIRS-10), a department-use module, is completed to report the same information as on the Apparatus or Resources Module, but it also provides for tracking the personnel associated with that apparatus.

The **Arson Module** (NFIRS-11) is completed to report additional information on fires that have been coded by the department as "intentionally set."

In addition to the 11 modules, a **Supplemental Form** (NFIRS–1S) can be used to report information on additional persons and entities involved in the incident and to collect additional special studies fields. This paper-only form extends the amount of information collected in the Basic Module.

Preparation of Modules

Both local and State agencies should establish standard procedures on how to complete the NFIRS reporting modules and how to submit the modules to the State reporting activity. These procedures will help ensure consistency in the data received and provide guidance to those filling out the modules. Each coded field in the on-line NFIRS systems has the capability to be expanded by another alpha-numeric character so that information more specific than the national standard addresses can be collected.

The majority of the information on the modules is obtained at the scene by emergency responder personnel. An emergency responder at the scene should be assigned the responsibility of recording the required information concerning each incident. To gather additional information or to confirm one's own impressions, the individual completing the module should contact others involved with the incident. Contacts may include on-scene fire service personnel, police and civilians at the scene, the dispatcher, EMS personnel, hospital staff, fire and building inspectors, the arson investigator, the local fire module coordinator, and State-level officials responsible for coordinating the reporting system. Most importantly, the module should reflect exactly what happened.

Once the module has been completed, the information should be reviewed at the local level before it is signed by the officer in charge at the incident and by the individual completing the module. Originals of the modules should be kept for departmental use and files, and copies forwarded to the State that will transmit them to the NFDC.

Modifications to original incident reports can be submitted later when additional information becomes available or if any of the original information changes or is found to be incorrect. A person injured in a fire who dies within 1 year as a result of the injuries is an example of the type of new information that could be cause for submitting a "change report."

Once computerized, the data can be presented in a variety of ways, such as summaries, comparisons, and reports. The web-based reporting tool made available to NFIRS users by the NFDC is able to produce a variety of reports. Many localities and departments develop data analysis and display programs to meet their own requirements. For more information concerning the new NFIRS 5.0, contact the USFA or visit its Web site at http://www.usfa.fema.gov/fireservice/nfirs/

Conventions Used in Completing Modules

Each time a fire service unit moves in response to an alarm, the Basic Module (NFIRS-1) must be completed. One report is completed for each incident. Other modules are completed as appropriate.

A form depicting the data for each module is shown at the beginning of that module's chapter. The entire set of forms (full-size) is included in Appendix A. The forms are divided into lettered sections, and blocks divide sections. Blocks are formed by the section letter and the number of the block within the section (e.g., Section A, Block A1). The different blocks within a section contain related information. The modules are designed to help emergency personnel report incident information in a straightforward and orderly manner. Many of the codes are printed on the paper modules to expedite the report process. For many situations, however, the correct codes will need to be looked up.

Modules should be completed according to the type of incident being reported. Instruction is given on the module when necessary. All sections that have a star $(\mbox{$^{\upsigma}$})$ by the title are required fields. Throughout this guide, notes or important considerations are indicated with a pointed finger $(\mbox{$\rlap{$\sim}$})$.

Each module is discussed one section at a time in the chapters that follow. Each item or block in each section is described by its definition, purpose, entry, and example. In addition, for those items requiring a numerical code, the codes and a coded example are shown.

- The definition provides a common meaning for all, which ensures consistency in understanding and application.
- The purpose gives a brief explanation as to why the information has been requested; it may also indicate how the information could be of additional use.
- The entry provides guidance on the type of information to place in the entry block.
- The example shows how the entry might look for a particular situation.

Within the data coding used in this system, a few conventions assist in reporting. The letters "N," "NN," or "NNN" are used to indicate "none" in a field that is normally coded. The letters "U," "UU," or "UUU" are used to indicate "unknown" or "undetermined" in a field that is normally coded. If the field is a numeric field such as dollar loss, 0 (zero) is used to indicate none. Numeric fields such as dollar loss can be left blank if a value is unknown or if the incident is not a fire.

The coded field should not be left blank as that is an indication that the person completing the report missed it or forgot to fill it out.

Please note that the numbers "0," "00," or "000" are valid codes for many coded fields. These have the value for "other" and are intended to be used where the item or issue being coded is identifiable but the code selection list does not contain the description of what has been identified for that data element. In some data elements, codes ending in "0" allow for further identification of the item or issue, as in the case where part of the answer is known but not enough to code it at the specific level required by the options in the list.

The entry of data into fields should follow the following conventions:

- Text fields should be left justified.
- Numeric fields should be right justified.
- Coded fields do not need to be justified since they should fit the entry space exactly.

Fire Department Header

Before data may be entered into NFIRS 5.0, each fire department must have established a header record. This record is established only once in the system and then updated whenever there is a change in the department's information.

Creation of or changes to the header record must be reviewed or approved by each department's State NFIRS program manager.

As a rule of thumb, if a department has a Fire Department Identification (FDID) number, a header has already been established. Most of the existing records were created from the conversion of NFIRS 4.1 header records at the State level; however, many of the fields may be blank because they are new to NFIRS 5.0. It is recommended that each department review their header record to ensure completeness.

The table on the following page shows the fire department header fields:

FIELD NAME	FIELD TYPE	FIELD LENGTH
Fire Department Identification*	Text	5
Fire Department State*	Coded	2
Record Type	Numeric	5
Transaction Type	Coded	1
Fire Department Name	Text	30
Fire Department Street Number or Milepost*	Text	8
Fire Department Street Prefix*	Coded	2
Fire Department Street or Highway Name*	Text	30
Fire Department Street Type*	Coded	4
Fire Department Street Suffix*	Coded	2
Fire Department City*	Text	20
Fire Department ZIP*	Numeric	9
Fire Department Phone	Numeric	10
Fire Department Fax	Numeric	10
Fire Department E-Mail	Text	45
Fire Department FIPS County Code	Text	3
Number of Stations	Numeric	3
Number of Paid Firefighters	Numeric	4
Number of Volunteer Firefighters	Numeric	4
Number of Volunteer Paid Per Call	Numeric	4

 $[\]star$ Definitions and abbreviations for these fields are presented in Chapter 3, Sections A and B.

Basic Module (NFIRS-1) **Fire Module** (NFIRS-2) **Structure Fire Module** (NFIRS-3) **Civilian Fire Casualty Module** (NFIRS-4) **Fire Service Casualty Module** (NFIRS-5) **EMS Module** (NFIRS-6) **HazMat Module** (NFIRS-7)

Chapter 3

BASIC MODULE (NFIRS-1)

U.S. Fire Administration
NATIONAL FIRE DATA CENTER

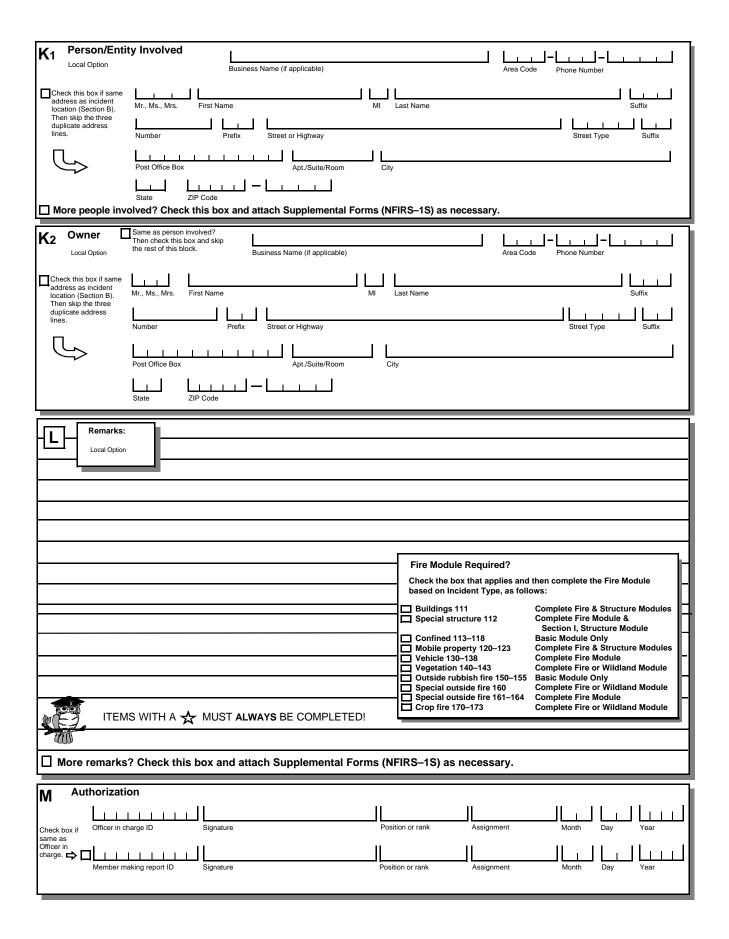
(NFIRS-9/-10)

Apparatus/ Personnel Modules

Wildland Fire Module (NFIRS-8)

> Arson Module (NFIRS-11)

A MM DD FDID State MIncident Date	YYYY L
	cate that the address for this incident is provided on the Wildland Fire "Alternative Location Specification." Use only for wildland fires. Street or Highway Street Type Suffix State ZIP Code
C Incident Type	E1 Dates and Times Month Day Year Hour Min
F Actions Taken	G1 Resources Check this box and skip this block if an Apparatus Personnel Suppression EMS Other Check box if resource counts include aid received resources. Check box if resource counts include aid received resources. G2 Estimated Dollar Losses and Values LOSSES: Required for all fires if known. Optional for non-fires. None Property \$
Completed Modules ☐ Fire-2 ☐ Structure Fire-3 ☐ Civilian Fire Cas4 ☐ Fire Service Cas5 ☐ EMS-6 ☐ HazMat-7 ☐ Wildland Fire-8 ☐ Apparatus-9 ☐ Personnel-10 ☐ Arson-11 ☐ H1 ★ Casualties ☐ Deaths In Fire Service	1
J Property Use None None Structures	341



Chapter 3 • Basic Module (NFIRS-1)

The purpose of the Basic Module is to collect information common to all incidents. The Basic Module is required for every type of incident to which a department responds.

Entries in the Basic Module determine what other modules need to be completed based on the type of incident involved. For example, fire incidents are also reported on the Fire Module (NFIRS-2). Additionally, the Structure Fire Module (NFIRS-3) is required if the fire reported in the Fire Module occurs in a structure.

A separate Civilian Fire Casualty Module (NFIRS-4) is required for each civilian who is injured as a direct result of a fire incident. A separate Fire Service Casualty Module (NFIRS-5) is required for each firefighter who is injured in response to an alarm whether or not a fire was involved.

Optional modules include the EMS, HazMat, Wildland Fire, Apparatus and Personnel, and Arson Modules. The type of incident reported or the nature of a particular incident, such as the release of hazardous materials at a fire after the arrival of the fire department, may trigger one or more of these additional modules. The amount of information needed in each module varies based on the type of incident, associated casualties, and property losses.

SECTION A

The field elements in Section A that are marked with a star (\$\frac{1}{2}\$) are required to be completed. Combined, these fields (FDIC, State, Incident Date, Incident Number, and Exposure) uniquely identify each incident.

□ Fire Department Identification (FDID) ☆

Definition

A unique five-character identifier assigned by the State to identify a particular fire department within the State. This identifier may also identify the county, fire district, or other jurisdiction in which the fire department is located. Many States use the two left-most digits to identify the particular department within a jurisdiction. All five spaces in this field must be occupied by numerals or alphanumeric characters. If the FDID is less than five characters, use leading zeros.

Purpose

The FDID number is used to identify incident data that have been collected and reported by individual departments. Feedback on local or regional incident experience can then be prepared and sent to individual agencies or specific fire departments.

Entry

Enter the State-assigned FDID.

Example

An FDID of 07434 is entered as:



State ☆

Definition

The State (or U.S. territory) where the fire department is located.

Purpose

This field provides an additional means of identifying a fire department, and in conjunction with other required Section A fields, uniquely identifies each incident.

Entry

Enter the two-digit alphabetic abbreviation from the following list for the State where the fire department is located:

	STATE/U.S. TERRITORY CODES							
AL	Alabama	KY	Kentucky	ND	North Dakota			
AK	Alaska	LA	Louisiana	ОН	Ohio			
ΑZ	Arizona	ME	Maine	OK	Oklahoma			
AR	Arkansas	MD	Maryland	OR	Oregon			
CA	California	MA	Massachusetts	PA	Pennsylvania			
CO	Colorado	MI	Michigan	RI	Rhode Island			
CT	Connecticut	MN	Minnesota	SC	South Carolina			
DE	Delaware	MS	Mississippi	SD	South Dakota			
DC	District of Columbia	MO	Missouri	TN	Tennessee			
FL	Florida	MT	Montana	TX	Texas			
GA	Georgia	NE	Nebraska	UT	Utah			
HI	Hawaii	NV	Nevada	VT	Vermont			
ID	Idaho	NH	New Hampshire	VA	Virginia			
IL	Illinois	NJ	New Jersey	WA	Washington			
IN	Indiana	NM	New Mexico	WV	West Virginia			
IA	lowa	NY	New York	WI	Wisconsin			
KS	Kansas	NC	North Carolina	WY	Wyoming			
	U	.S. TER	RITORIES/POSSESSIONS					
AS	American Samoa	GU	Guam	PR	Puerto Rico			
CZ	Canal Zone	MH	Marshall Islands	UM	U.S. Minor Outlying Islands			
DD	Department of Defense	MP	Northern Mariana Islands	VI	Virgin Islands			
FM	Federated States of Micronesia	PW	Palau					
	N	ON-ST	ATE REPORTING ENTITIES					
DD	Department of Defense	NA	Native American Tribal Authority	00	Other			

A

Example

Virginia is entered as VA:



Incident Date A

Definition

The month, day, and year of the incident. This date is when the alarm was received by the fire department and must be the same as the date for the alarm time.

Purpose

In conjunction with other required Section A fields, this element uniquely identifies each incident.

Entry

Enter the month, day, and year (mm/dd/yyyy) that the initial incident alarm was received by the department. It must be entered for each incident.

The Incident Date is the same as the Alarm date (Block E1), except if the incident is an exposure and the exposure occurs on a subsequent day.

Example

An incident occurs and is reported on December 12, 2001:



Station

Definition

The number or identifier of a particular fire station within a fire department. This is a local option.

Purpose

The station number provides a means of tracking incident data that have been collected and reported by individual stations. Specific feedback on incident experience can then be prepared and sent to individual stations. The station number is also useful for analyzing different levels of activity within a fire department.

Entry

Enter the station number in the space provided. The fire department should determine which station number should be entered (e.g., first arriving unit, station's area). The station number is left justified. Leave blank if there is only one station in the department.

Example

Station 13 is entered as:



Incident Number 🏠

Definition

A unique number assigned to an incident.

The Incident Number is a sequential number and is numeric only; it is not an incident identification number.

Purpose

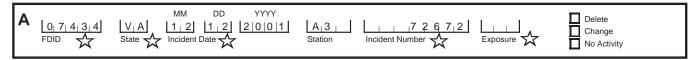
In conjunction with other required Section A fields, this element uniquely identifies each incident.

Entry

Enter the number assigned to the incident. The number may be assigned at the local, county, or district level, depending on policies. It may be necessary to obtain this number from an alarm or dispatch center. It must be unique for each incident on a given day.

Example

A call with an incident number of 72672 is entered as:



Exposure Number \$\triangle \tag{7}\$

Definition

Exposure is defined as a fire resulting from another fire outside that building, structure, or vehicle, or a fire that extends to an outside property from a building, structure, or vehicle. For example, if the building fire ignites a truck parked outside, the truck fire is an exposure fire.

■ In the case of buildings with internal fire separations, treat the fire spread from one separation to another as an exposure. Treating multiple ownership of property within a building (e.g., condominiums) as exposures, unless separated by fire-rated compartments, is discouraged.

Α

Purpose

Although the Incident Number permits all properties involved in a fire incident to be related together, the Exposure Number identifies each separate property type involved in the fire. This makes it possible to capture the specific details of the fire in each exposure and to relate all the exposures to the basic incident, if necessary. The Exposure Number, in conjunction with other required Section A fields, uniquely identifies each incident itemized in Section C.

When a fire involves more than one building, each building fire should be considered a separate fire, with the ignition for all but the original building fire classified as exposure fires.

Entry

In a fire involving exposures, an additional Basic Module should be completed for each exposure. Each module completed for an exposure should contain the same Incident Number assigned to the original property involved. A separate sequential Exposure Number is assigned to each exposure. The original incident is always coded "000," and exposures are numbered sequentially and incremented by 1 beginning with "001." The three-character numeric field is zero filled, not right justified.

The Incident Date for each exposure remains the same as that of the basic incident; however, the Alarm Time in Block E1 should reflect the time of each new exposure.

The relevant data for each exposure should then be recorded using the appropriate modules.

- Treat similar items in a group as a single exposure (such as a fleet of cars).
- Be sure to check or mark the exposure fire check box Cause of Ignition (Block E1) on the Fire Module for each exposure fire, and then skip to Section G on the Fire Module.

Example

The first exposure fire is entered as 001:



Delete/Change/No Activity

When filling out the Basic Module for a new incident, leave the Delete/Change/No Activity boxes blank.

Definition

Indicates a change to information submitted on a previous Basic Module, signifies the deletion of incorrect information, or reports no activity. The officer who signed the original Basic Module report should authorize changes or deletions.

Purpose

These boxes indicate whether previously provided information is to be changed or deleted or to report that no activity occurred during a reporting period.

Entry

Delete: Check or mark this box when you have previously submitted data on this incident and now want to have the data on this incident deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. This will delete all data regarding the incident. Forward the report according to your normally established procedures.

Change: Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

No Activity: If the fire department has had no incidents during the month, a no activity report should be submitted. Unless otherwise specified by the State, this report should be submitted monthly according to your normally established procedures.

Examples

Deleting a previously submitted incident:

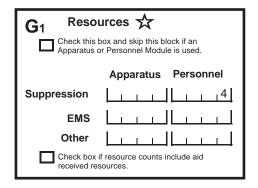
Check or mark the Delete box and complete all other fields in Section A exactly as they were entered in the original report.

Changing a previously submitted incident:

It was incorrectly reported that six firefighters responded to a fire incident. Later, the officer in charge corrected the information and sent in a Change report with four fire service personnel responding:



The Change box is checked or marked and Block G1 would look like the following example:



Submitting a report of No Activity:

Check or mark the No Activity box and fill both the Incident Number and the Exposure fields with zeros. The Incident Date fields correspond to the last day of the month of no activity:



SECTION B

Section B collects information on the specific incident location.

The check box at the top of the section should be checked or marked only if the incident address is provided on the Wildland Fire Module (NFIRS–8). The Wildland Fire Module provides an alternative method of recording the incident location.

■ Location Type ☆

The location of the incident, which may be a street address, directions from a recognized landmark, or an intersection of two roadways.

Purpose

The exact location of the incident is used for spatial analyses and response planning that can be linked to demographic data. Incident address information is required at the local government level to establish an official document of record.

Entry

Check or mark the single box that best indicates the address type that will be entered. If the incident is a wildland fire, the alternate address box at the top of Section B may be checked or marked to indicate that the wildland location scheme is provided in the Wildland Fire module.

Street address: A normal street address. Check or mark this box and complete the address fields.

Intersection: There is no street address. The incident location is at the intersection of two or more streets, roads, etc. Check or mark this box and enter the first street in the Street or Highway field. The intersecting street(s) is entered in the Cross Street or Directions field.

In front of: No street address is available. However, the incident location is in front of an area with a street address. Check or mark this box and complete the address fields. An example of this might be a park, plaza, or common area in front of a building with a street address.

Rear of: No street address is available. However, the incident location is in the rear of an area with a street address. Check or mark this box and complete the address fields. An example of this might be an alley that runs behind a building with a street address.

В

Adjacent to: No street address is available. However, the incident location is adjacent to an area with a street address. Check or mark this box and complete the address fields. An example of this might be an empty lot or common area that is next to a building with a street address.

Directions: No street address is available and no street address is available near the incident scene. Check or mark this box and enter brief directions for the location of the incident in the Cross Street or Directions field. If the area is along an interstate or State highway, the closest milepost should be entered in the Number/Milepost address field. An example of this might be a brush fire that occurs in a remote area or a fire that occurs on or near an interstate highway.

United States National Grid: Provides a geospatial address based on universally defined coordinate and grid systems and a common frame of reference across multiple jurisdictions easily extended worldwide. Using an alpha-numeric reference that overlays the UTM (q.v.) coordinate system, USNG spatial addresses break down into three parts: Grid Zone Designation, for a world-wide unique address; 100,000-meter Square Identification, for regional areas; Grid Coordinates, for local areas. USNG improves interoperability of location appliances with printed maps through a consistent and preferred geospatial grid reference system. Relates to GPS (q.v.). Contributed by Tom May. (International). For more information and examples on use, see: http://www.xyproject.org/How%20To%20Read%20USNGHow%20 to%20read%20USNG.htm

Example

The location of an incident that occurred at the intersection of Gallows Road and Lee Highway is entered as:

В	Location Type 🖈	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract
	☐ Street address ☐ Intersection	Gallows	R_1D_1
	☐ In front of	Number/Milepost Prefix Street or Highway	Street Type Suffix
	Rear of		
	Adjacent to	Apt./Suite/Room City	State ZIP Code
	☐ Directions	Lee Highway	
	U.S. National Grid	Cross Street, Directions or National Grid, as applicable	

LOCATION TYPE CODES

- 1 Street address
- 2 Intersection
- 3 In front of
- 4 Rear of
- 5 Adjacent to
- 6 Directions
- 7 U.S. National Grid

В

Census Tract

Definition

The census tract number is a six-digit number assigned by the U.S. Census Bureau that identifies an area of land within the United States. Not all jurisdictions have census tract numbers.

Purpose

This element provides a means to cross-reference geographic and population information that is available from the U.S. Census Bureau to incident data for comparative analysis.

Entry

Enter the census tract number for the property involved in the incident. The right two spaces are always assumed to follow a decimal point. If the incident occurs in an area where a census tract number has not been assigned, leave blank.

Local planning commissions or zoning commissions may be able to provide census tract numbers or maps for your response area.

Example

A location having a census tract number of 1066.01 is entered as:

В	Location Type 太	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract
	☐ Street address ☐ Intersection ☐ In front of	Number/Milepost Prefix Street or Highway	R D
	Rear of Adjacent to	Apt./Suite/Room City	State ZIP Code
	☐ Directions ☐ U.S. National Grid	Lee Highway Cross Street, Directions or National Grid, as applicable	

Number/Milepost

Definition

The number or milepost of the specific location where the incident occurred.

Purpose

This field further refines the incident address.

Entry

For structures and lots, enter the street number. For highways, railroads, etc., enter the milepost number. For intersections, leave blank. For block addresses, enter the block number. The maximum number of characters available in the Number/Milepost field is 8.

Example

The incident occurred at 8034 Alta Vista Drive:

В	Location Type 太	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract		
	Street address Intersection In front of	8034 L Alta Vista Number/Milepost Prefix Street or Highway	U R I I I I I I I I I I I I I I I I I I		
	☐ Rear of ☐ Adjacent to ☐ Directions	Apt./Suite/Room City	State ZIP Code		
	U.S. National Grid	Cross Street, Directions or National Grid, as applicable			

Street Prefix

Definition

The directional descriptor appearing before a street or highway name.

Purpose

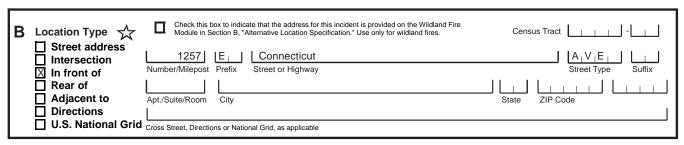
This field further refines the incident address.

Entry

Enter the street prefix abbreviation. Leave blank if not applicable

Example

A vehicle fire in front of 1257 East Connecticut Avenue is entered as:



STREET PREFIX CODES

E	East	NE	Northeast
N	North	NW	Northwest
S	South	SE	Southeast
W	West	SW	Southwest

Street or Highway Name

Definition

The street or highway name where the incident occurred.

Purpose

This field further refines the incident address. This information can also be useful for identifying local problems, such as checking for multiple incidents at the same address and checking ZIP codes or Census Tract entries.

Entry

Enter the name of the street or highway name in the space provided. The maximum number of characters available in the Street or Highway field is 30.

- If the involved property is a motor vehicle, boat, or other property in transit, list the nearest address or describe the location where the incident occurred. If necessary, include a sketch in the Remarks section (L). It is important that a person viewing the report know where the incident occurred.
- If a street type is not listed on the code list on the following page (see "Street Type" below), enter the street type as part of the Street or Highway name.

Example

A grass fire on Wolftrap Road about 1/2 mile east of I-66:

В	Location Type	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract
	☐ Intersection ☐ In front of	Number/Milepost Prefix Street or Highway	Street Type Suffix
	☐ Rear of ☐ Adjacent to ☑ Directions	Apt./Suite/Room City 1/2 mile east of I-66	State ZIP Code
	U.S. National Grid		

Street Type

Definition

The street type descriptor appearing after a street or highway name.

Purpose

This field further refines the incident address.

Entry

Enter the appropriate Street Type code (established by the U.S. Postal Service) from the list on the following page. If the street type is not listed, enter the street type as part of the Street or Highway name. (See Street or Highway Name above.)



Example

The accident occurred on Walnut Street:

B Location Type 🖈	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract	
 ☑ Street address ☐ Intersection ☐ In front of ☐ Rear of ☐ Adjacent to ☐ Directions ☐ U.S. National Grid 	Number/Milepost Prefix Street or Highway Apt./Suite/Room City Cross Street, Directions or National Grid, as applicable	Street Type Suffix State ZIP Code	

STREET PREFIX CODES					
ALY	Alley	CMN	Common	FLD	Field
ANX	Annex	CMNS	Commons	FLDS	Fields
ARC	Arcade	COR	Corner	FLT	Flat
AVE	Avenue	CORS	Corners	FLTS	Flats
BCH	Beach	СТ	Court	FRD	Ford
BND	Bend	CTS	Courts	FRDS	Fords
BLF	Bluff	CV	Cove	FRST	Forest
BLFS	Bluffs	CVS	Coves	FRG	Forge
BTM	Bottom	CRK	Creek	FRGS	Forges
BLVD	Boulevard	CRES	Crescent	FRK	Fork
BR	Branch	CRST	Crest	FRKS	Forks
BRG	Bridge	XING	Crossing	FT	Fort
BRK	Brook	XRD	Crossroad	FWY	Freeway
BRKS	Brooks	XRDS	Crossroads	GDN	Garden
BG	Burg	CURV	Curve	GDNS	Gardens
BGS	Burgs	DL	Dale	GTWY	Gateway
BYP	Bypass	DM	Dam	GLN	Glen
СР	Camp	DV	Divide	GLNS	Glens
CYN	Canyon	DR	Drive	GRN	Green
CPE	Cape	DRS	Drives	GRNS	Greens
CSWY	Causeway	EST	Estate	GRV	Grove
CTR	Center	ESTS	Estates	GRVS	Groves
CTRS	Centers	EXPY	Expressway	HBR	Harbor
CIR	Circle	EXT	Extension	HBRS	Harbors
CIRS	Circles	EXTS	Extensions	HVN	Haven
CLF	Cliff	FALL	Fall	HTS	Heights
CLFS	Cliffs	FLS	Falls	HWY	Highway
CLB	Club	FRY	Ferry	HL	Hill

STREET PREFIX CODES (CONT'D)					
HLS	Hills	OVAL	Oval	SPGS	Springs
HOLW	Hollow	PARK	Park	SPUR	Spur
INLT	Inlet	PKY	Parkway	SPRS	Spurs
IS	Island	PKYS	Parkways	SQ	Square
ISS	Islands	PASS	Pass	SQS	Squares
ISLE	Isle	PSGE	Passage	STA	Station
JCT	Junction	PATH	Path	STRA	Stravenue
JCTS	Junctions	PIKE	Pike	STRM	Stream
KY	Key	PNE	Pine	ST	Street
KYS	Keys	PNES	Pines	STS	Streets
KNL	Knoll	PL	Place	SMT	Summit
KNLS	Knolls	PLZ	Plaza	TER	Terrace
LK	Lake	PT	Point	TRWY	Throughway
LKS	Lakes	PTS	Points	TRCE	Trace
LNDG	Landing	PRT	Port	TRAK	Track
LN	Lane	PRTS	Ports	TRFY	Trafficway
LGT	Light	PR	Prairie	TRL	Trail
LGTS	Lights	RADL	Radial	TRLR	Trailer
LF	Loaf	RAMP	Ramp	TUNL	Tunnel
LCK	Lock	RNCH	Ranch	TPKE	Turnpike
LCKS	Locks	RPD	Rapid	UPAS	Underpass
LDG	Lodge	RPDS	Rapids	UN	Union
LOOP	Loop	RST	Rest	UNS	Unions
MALL	Mall	RDG	Ridge	VLY	Valley
MNR	Manor	RDGS	Ridges	VLYS	Valleys
MNRS	Manors	RIV	River	VIA	Viaduct
MDW	Meadow	RD	Road	VW	View
MDWS	Meadows	RDS	Roads	VWS	Views
MEWS	Mews	RT	Route	VLG	Village
ML	Mill	ROW	Row	VLGS	Villages
MLS	Mills	RUE	Rue	VL	Ville
MSN	Mission	RUN	Run	VIS	Vista
MTWY	Motorway	SHL	Shoal	WALK	Walk
MT	Mount	SHLS	Shoals	WALK	Walks
MTN	Mountain	SHR	Shore	WALL	Wall
MTNS	Mountains	SHRS	Shores	WAY	Way
NCK	Neck	SKWY	Skyway	WL	Well
ORCH	Orchard	SPG	Spring	WLS	Wells

Street Suffix

Definition

The directional descriptor appearing after a street or highway name.

Purpose

This field further refines the incident address.

Entry

Enter the street suffix abbreviation. Leave blank if not applicable.

Example

A grass fire in the rear of 3827 Georgia Avenue East is entered as:

В	Location Type 太	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract
	☐ Street address☐ Intersection☐ In front of	Number/Milepost Prefix Street or Highway	
	☐ Rear of ☐ Adjacent to ☐ Directions	Apt./Suite/Room City	State ZIP Code
	U.S. National Grid	Cross Street, Directions or National Grid, as applicable	

STREET SUFFIX CODES

E	East	NE	Northeast
N	North	NW	Northwest
S	South	SE	Southeast
W	West	SW	Southwest

Apartment, Suite, or Room

Definition

The number of the specific apartment, suite, or room where the incident occurred.

Purpose

This field further refines the incident address. This number is part of the address information when the incident occurs within an apartment, suite, or identifiable room or area generally rented or leased.

Entry

Enter the apartment, suite, or room number in the space provided (any combination of numbers and letters). Leave blank if not applicable. The maximum number of characters available in the Apartment, Suite, or Room field is 15.

Example

The incident occurred in apartment 8-C:

В	Location Type 太	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract
		3827 Georgia Number/Milepost Prefix Street or Highway	
	☐ Rear of ☐ Adjacent to	Apt./Suite/Room City	State ZIP Code
	☐ Directions☐ U.S. National Grid	Cross Street, Directions or National Grid, as applicable	

City

Definition

The city where the incident occurred. If the incident occurred in an unincorporated area, use the city found in the mailing address for the incident location.

Purpose

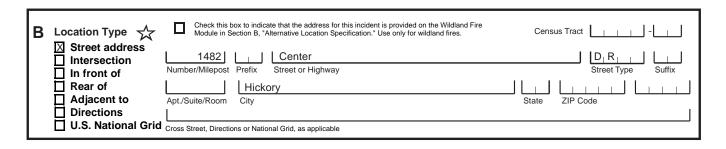
This field further refines the incident address.

Entry

Enter the city where the incident occurred, or the city used in the mailing address for the incident location. The maximum number of characters available in the City field is 20.

Example

The incident occurred in the city of Hickory:



State

Definition

The State where the incident occurred.

Purpose

This field further refines the incident address, and it provides a means of linking incident data to other geographic and population factors for comparative analysis at the State level.



Entry

В

Enter the alphabetic abbreviation for the State (see page 3-5) where the incident occurred.

Example

North Carolina is entered as NC:

	et
	D R Street Type Suffix
Rear of Hickory N ₁ C _	
Adjacent to Apt./Suite/Room City State ZIP C Directions U.S. National Grid Cross Street, Directions or National Grid, as applicable	Jode

ZIP Code

Definition

The numerical code assigned by the U.S. Postal Service to all U.S. jurisdictions.

Purpose

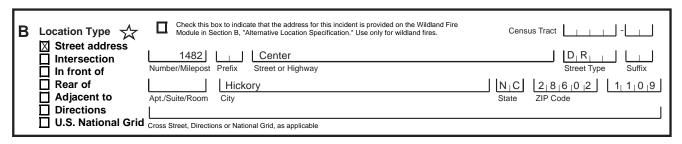
This field completes the information for identifying the exact incident address, and it provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local and regional levels.

Entry

Enter the postal ZIP code number for the address of the property involved in the incident. If the last four digits are unknown, leave that field blank.

Example

A house fire occurs in an area with the ZIP code 28602-1109:



В

Cross Street, Directions or U.S. National Grid

Use directions only if the location cannot otherwise be identified. Enter USNG coordinates if U.S. National Grid is selected for Location Type.

Definition

The nearest cross street to the incident address or directions from a recognized landmark or the second street name of an intersection if Directions is selected as the Location Type. If U.S. National Grid is selected as the Location Type, enter the USNG address (a geospatial address based on universally defined coordinate and grid systems and a common frame of reference across multiple jurisdictions easily extended world-wide). Using an alpha-numeric reference that overlays the UTM (q.v.) coordinate system, USNG spatial addresses break down into three parts: Grid Zone Designation, for a world-wide unique address; 100,000-meter Square Identification, for regional areas; Grid Coordinates, for local areas.

Purpose

This element helps determine the exact location of the incident. This information may also be useful for identifying local problems, such as checking for multiple incidents at the same location.

Entry

In the space provided, describe the nearest cross street or provide directions from a recognized landmark. The maximum number of characters available in the Cross Street or Directions field is 30. If U. S. National Grid is selected as the Location type, the USNG coordinates of the incident location is entered using 10 digit precision at a minimum. The maximum entry is 15 characters. Note: USNG may also be used to precisely describe the location of a Wildland Fire incident instead of Longitude/Latitude coordinates or Township Ranges

Example

The incident occurred on 10th Street with N Street being the nearest cross street:

B Location Type 太	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract
☐ Street address☐ Intersection☐ In front of	Number/Milepost Prefix Street or Highway	Street Type Suffix
Rear of Adjacent to	Apt/Suite/Room City	State ZIP Code
☐ U.S. National Grid	N Street Cross Street, Directions or National Grid, as applicable	

SECTION C

Incident Type ☆

• Incident Type was known as Type of Situation Found in NFIRS 4.1.

Definition

This is the actual situation that emergency personnel found on the scene when they arrived. These codes include the entire spectrum of fire department activities from fires to EMS to public service.

The type of incident reported here is not always the same as the incident type initially dispatched.

Purpose

This critical information identifies the various types of incidents to which the fire department responds and allows the fire department to document the full range of incidents it handles.

This information can be used to analyze the frequency of different types of incidents, provide insight on fire and other incident problems, and identify training needs.

This element determines which modules will subsequently be completed.

Entry

Enter the three-digit code and a written description that best describes the type of incident. This entry is generally the type of incident found when emergency personnel arrived at the scene, but if a more serious condition developed after the fire department arrival on the scene, then that incident type should be reported. The codes are organized in a series:

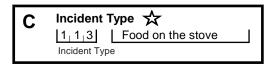
SERIES	HEADING
100	Fire
200	Overpressure Rupture, Explosion, Overheat (No Fire)
300	Rescue and Emergency Medical Service (EMS) Incidents
400	Hazardous Condition (No Fire)
500	Service Call
600	Good Intent Call
700	False Alarm and False Call
800	Severe Weather and Natural Disaster
900	Special Incident Type

- For incidents involving fire and hazardous materials or fire and EMS, use the fire codes. Always use the lowest numbered series that applies to the incident. You will have an opportunity to describe multiple actions taken later in the report.
- For vehicle fires on a structure, use the mobile property fire codes (130–138) unless the structure became involved.

For fires in buildings that are confined to noncombustible containers, use codes 113–118 of the structure fire codes when there is no flame damage beyond the noncombustible container.

Example

Fire in food on the stove that was confined to the pot (113).



INCIDENT TYPE CODES

Fire. Includes fires out on arrival and gas vapor explosions (with extremely rapid combustion).

Structure fire

- Building fire. Excludes confined fires (113–118).
- Fire in structure, other than in a building. Included are fires on or in piers, quays, or pilings: tunnels or underground connecting structures; bridges, trestles, or overhead elevated structures; transformers, power or utility vaults or equipment; fences; and tents.
- 113 Cooking fire involving the contents of a cooking vessel without fire extension beyond the vessel.
- 114 Chimney or flue fire originating in and confined to a chimney or flue. Excludes fires that extend beyond the chimney (111 or 112).
- Incinerator overload or malfunction, but flames cause no damage outside the incinerator.
- Fuel burner/boiler, delayed ignition or malfunction, where flames cause no damage outside the fire box.
- 117 Commercial compactor fire, confined to contents of compactor. Excluded are home trash compactors.
- 118 Trash or rubbish fire in a structure, with no flame damage to structure or its contents.

Fire in mobile property used as a fixed structure. Includes mobile homes, motor homes, camping trailers.

- Fire in mobile home used as a fixed residence. Includes mobile homes when not in transit and used as a structure for residential purposes; and manufactured homes built on a permanent chassis.
- Fire in a motor home, camper, or recreational vehicle when used as a structure. Includes motor homes when not in transit and used as a structure for residential purposes.
- Fire in a portable building, when used at a fixed location. Includes portable buildings used for commerce, industry, or education and trailers used for commercial purposes.
- Fire in mobile property used as a fixed structure, other.

Mobile property (vehicle) fire. Excludes mobile properties used as a structure (120 series). If a vehicle fire occurs on a bridge and does not damage the bridge, it should be classified as a vehicle fire.

- Passenger vehicle fire. Includes any motorized passenger vehicle, other than a motor home (136) (e.g., pickup trucks, sport utility vehicles, buses).
- Road freight or transport vehicle fire. Includes commercial freight hauling vehicles and contractor vans or trucks. Examples are moving trucks, plumber vans, and delivery trucks.
- 133 Rail vehicle fire. Includes all rail cars, including intermodal containers and passenger cars that are mounted on
- Water vehicle fire. Includes boats, barges, hovercraft, and all other vehicles designed for navigation on water.
- 135 Aircraft fire. Includes fires originating in or on an aircraft, regardless of use.
- Self-propelled motor home or recreational vehicle. Includes only self-propelled motor homes or recreational vehicles when being used in a transport mode. Excludes those used for normal residential use (122).
- 137 Camper or recreational vehicle (RV) fire, not self-propelled. Includes trailers. Excludes RVs on blocks or used regularly as a fixed building (122) and the vehicle towing the camper or RV or the campers mounted on pick ups (131).

- Off-road vehicle or heavy equipment fire. Includes dirt bikes, specialty off-road vehicles, earth-moving equipment (bulldozers), and farm equipment.
- Mobile property (vehicle) fire, other.

Natural vegetation fire. Excludes crops or plants under cultivation (see 170 series).

- Forest, woods, or wildland fire. Includes fires involving vegetative fuels, other than prescribed fire (632), that occur in an area in which development is essentially nonexistent, except for roads, railroads, power lines, and the like. Also includes forests managed for lumber production and fires involving elevated fuels such as tree branches and crowns. Excludes areas in cultivation for agricultural purposes such as tree farms or crops (17x series).
- Brush or brush-and-grass mixture fire. Includes ground fuels lying on or immediately above the ground such as duff, roots, dead leaves, fine dead wood, and downed logs.
- Grass fire. Includes fire confined to area characterized by grass ground cover, with little or no involvement of other ground fuels; otherwise, see 142.
- 140 Natural vegetation fire, other.

Outside rubbish fire. Includes all rubbish fires outside a structure or vehicle.

- Outside rubbish, trash, or waste fire not included in 152–155. Excludes outside rubbish fires in a container or receptacle (154).
- Garbage dump or sanitary landfill fire.
- 153 Construction or demolition landfill fire.
- Dumpster or other outside trash receptacle fire. Includes waste material from manufacturing or other production processes. Excludes materials that are not rubbish or have salvage value (161 or 162).
- Outside stationary compactor or compacted trash fire. Includes fires where the only material burning is rubbish. Excludes fires where the compactor is damaged (162).
- Outside rubbish fire, other.

Special outside fire. Includes outside fires with definable value. Excludes crops and orchards (170 series).

- Outside storage fire on residential or commercial/industrial property, not rubbish. Includes recyclable materials at dropoff points.
- Outside equipment fire. Includes outside trash compactors, outside HVAC units, and irrigation pumps. Excludes special structures (110 series) and mobile construction equipment (130 series).
- Outside gas or vapor combustion explosion without sustained fire.
- Outside mailbox fire. Includes dropoff boxes for delivery services.
- 160 Special outside fire, other.

Cultivated vegetation, crop fire

- 171 Cultivated grain or crop fire. Includes fires involving corn, wheat, soybeans, rice, and other plants before harvest.
- 172 Cultivated orchard or vineyard fire.
- 173 Cultivated trees or nursery stock fire. Includes fires involving Christmas tree farms and plants under cultivation for transport off-site for ornamental use.
- 170 Cultivated vegetation, crop fire, other.

Fire, other

100 Fire, other.

Overpressure Rupture, Explosion, Overheat (No Fire). Excludes steam mistaken for smoke.

Overpressure rupture from steam (no ensuing fire)

- Overpressure rupture of steam pipe or pipeline.
- 212 Overpressure rupture of steam boiler.
- Overpressure rupture of pressure or process vessel from steam.
- Overpressure rupture from steam, other.

Overpressure rupture from air or gas (no ensuing fire). Excludes steam or water vapor.

- Overpressure rupture of air or gas pipe or pipeline.
- Overpressure rupture of boiler from air or gas. Excludes steam-related overpressure ruptures.

- Overpressure rupture of pressure or process vessel from air or gas, not steam.
- Overpressure rupture from air or gas, other.

Overpressure rupture from chemical reaction (no ensuing fire)

Overpressure rupture of pressure or process vessel from a chemical reaction.

Explosion (no fire)

- Munitions or bomb explosion (no fire). Includes explosions involving military ordnance, dynamite, nitroglycerin, plastic explosives, propellants, and similar agents with a UN classification 1.1 or 1.3. Includes primary and secondary high explosives.
- Blasting agent explosion (no fire). Includes ammonium nitrate and fuel oil (ANFO) mixtures and explosives with a UN Classification 1.5 (also known as blasting agents).
- 243 Fireworks explosion (no fire). Includes all classes of fireworks.
- Dust explosion (no fire).
- Explosion (no fire), other.

Excessive heat, scorch burns with no ignition

Excessive heat, overheat scorch burns with no ignition. Excludes lightning strikes with no ensuing fire (814).

Overpressure rupture, explosion, overheat, other

200 Overpressure rupture, explosion, overheat, other.

Rescue and Emergency Medical Service Incident

Medical assist

Medical assist. Includes incidents where medical assistance is provided to another group/agency that has primary EMS responsibility. (Example, providing assistance to another agency-assisting EMS with moving a heavy patient.)

Emergency medical service incident

- EMS call. Includes calls when the patient refuses treatment. Excludes vehicle accident with injury (322) and pedestrian struck (323).
- Motor vehicle accident with injuries. Includes collision with other vehicle, fixed objects, or loss of control resulting in leaving the roadway.
- Motor vehicle/pedestrian accident (MV Ped). Includes any motor vehicle accident involving a pedestrian injury.
- 324 Motor vehicle accident with no injuries.
- 320 Emergency medical service incident, other.

Lock-In

Lock-in. Includes opening locked vehicles and gaining entry to locked areas for access by caretakers or rescuers, such as a child locked in a bathroom. Excludes lock-outs (511).

Search for lost person

- Search for person on land. Includes lost hikers and children, even where there is an incidental search of local bodies of water, such as a creek or river.
- Search for person in water. Includes shoreline searches incidental to a reported drowning call.
- 343 Search for person underground. Includes caves, mines, tunnels, and the like.
- 340 Search for lost person, other.

Extrication, rescue

- Extrication of victim(s) from building or structure, such as a building collapse. Excludes high-angle rescue (356).
- Extrication of victim(s) from vehicle. Includes rescues from vehicles hanging off a bridge or cliff.
- Removal of victim(s) from stalled elevator.
- 354 Trench/Below-grade rescue.
- Confined space rescue. Includes rescues from the interiors of tanks, including areas with potential for hazardous atmospheres such as silos, wells, and tunnels.
- 356 High-angle rescue. Includes rope rescue and rescues off of structures.
- 357 Extrication of victim(s) from machinery. Includes extrication from farm or industrial equipment.

350 Extrication, rescue, other.

Water and ice-related rescue

- 361 Swimming/Recreational water areas rescue. Includes pools and ponds. Excludes ice rescue (362).
- 362 Ice rescue. Includes only cases where victim is stranded on ice or has fallen through ice.
- 363 Swift-water rescue. Includes flash flood conditions.
- 364 Surf rescue.
- Watercraft rescue. Excludes rescues near the shore and in swimming/recreational areas (361). Includes people falling overboard at a significant distance from land.
- 360 Water and ice-related rescue, other.

Electrical rescue

- 371 Electrocution or potential electrocution. Excludes people trapped by power lines (372).
- Trapped by power lines. Includes people trapped by downed or dangling power lines or other energized electrical equipment.
- 370 Electrical rescue, other.

Rescue or EMS standby

Rescue or EMS standby for hazardous conditions. Excludes aircraft standby (462).

Rescue, emergency medical service (EMS) incident, other

300 Rescue and EMS incident, other.

Hazardous Condition (No Fire)

Combustible/Flammable spills and leaks

- Gasoline or other flammable liquid spill (flash point below 100 degrees F at standard temperature and pressure (Class I)).
- Gas leak (natural gas or LPG). Excludes gas odors with no source found (671).
- Oil or other combustible liquid spill (flash point at or above 100 degrees F at standard temperature and pressure (Class II or III)).
- 410 Combustible and flammable gas or liquid spills or leaks, other.

Chemical release, reaction, or toxic condition

- Chemical hazard (no spill or leak). Includes the potential for spills or leaks.
- 422 Chemical spill or leak. Includes unstable, reactive, explosive material.
- 423 Refrigeration leak. Includes ammonia.
- Carbon monoxide incident. Excludes incidents with nothing found (736 or 746).
- 420 Toxic chemical condition, other.

Radioactive condition

- Radiation leak, radioactive material. Includes release of radiation due to breaching of container or other accidental release.
- 430 Radioactive condition, other.

Electrical wiring/Equipment problem

- Heat from short circuit (wiring), defective or worn insulation.
- 442 Overheated motor or wiring.
- 443 Breakdown of light ballast.
- Power line down. Excludes people trapped by downed power lines (372).
- 445 Arcing, shorted electrical equipment.
- Electrical wiring/equipment problem, other.

Biological hazard

451 Biological hazard, confirmed or suspected.

Accident, potential accident

- 461 Building or structure weakened or collapsed. Excludes incidents where people are trapped (351).
- Aircraft standby. Includes routine standby for takeoff and landing as well as emergency alerts at airports.
- Vehicle accident, general cleanup. Includes incidents where FD is dispatched after the accident to clear away debris. Excludes extrication from vehicle (352) and flammable liquid spills (411 or 413).
- 460 Accident, potential accident, other.

Explosive, bomb removal

Explosive, bomb removal. Includes disarming, rendering safe, and disposing of bombs or suspected devices. Excludes bomb scare (721).

Attempted burning, illegal action

- 481 Attempt to burn. Includes situations in which incendiary devices fail to function.
- Threat to burn. Includes verbal threats and persons threatening to set themselves on fire. Excludes an attempted burning (481).
- 480 Attempted burning, illegal action, other.

Hazardous condition, other

400 Hazardous condition (no fire), other.

Service Call

Person in distress

- Lock-out. Includes efforts to remove keys from locked vehicles. Excludes lock-ins (331).
- Ring or jewelry removal, without transport to hospital. Excludes persons injured (321).
- 510 Person in distress, other.

Water problem

- Water (not people) evacuation. Includes the removal of water from basements. Excludes water rescues (360 series).
- Water or steam leak. Includes open hydrant. Excludes overpressure ruptures (211).
- 520 Water problem, other.

Smoke, odor problem

531 Smoke or odor removal. Excludes the removal of any hazardous materials.

Animal problem or rescue

- Animal problem. Includes persons trapped by an animal or an animal on the loose.
- 542 Animal rescue.
- 540 Animal problem or rescue, other.

Public service assistance

- Assist police or other governmental agency. Includes forcible entry and the provision of lighting.
- Police matter. Includes incidents where FD is called to a scene that should be handled by the police.
- Public service. Excludes service to governmental agencies (551 or 552).
- Assist invalid. Includes incidents where the invalid calls the FD for routine help, such as assisting a person in returning to bed or chair, with no transport or medical treatment given.
- Defective elevator, no occupants.
- Public service assistance, other.

Unauthorized burning

Unauthorized burning. Includes fires that are under control and not endangering property.

Cover assignment, standby at fire station, move-up

Cover assignment, assist other fire agency such as standby at a fire station or move-up.

Service call, other

500 Service call, other.

Good Intent Call

Dispatched and canceled en route

Dispatched and canceled en route. Incident cleared or canceled prior to arrival of the responding unit. If a unit arrives on the scene, fill out the applicable code.

Wrong location, no emergency found

- Wrong location. Excludes malicious false alarms (710 series).
- No incident found on arrival at dispatch address.

Controlled burning

- Authorized controlled burning. Includes fires that are agricultural in nature and managed by the property owner. Excludes unauthorized controlled burning (561) and prescribed fires (632).
- Prescribed fire. Includes fires ignited by management actions to meet specific objectives and have a written, approved prescribed fire plan prior to ignition. Excludes authorized controlled burning (631).

Vicinity alarm

Vicinity alarm (incident in other location). For use only when an erroneous report is received for a legitimate incident. Includes separate locations reported for an actual fire and multiple boxes pulled for one fire.

Steam, other gas mistaken for smoke

- 651 Smoke scare, odor of smoke, not steam (652). Excludes gas scares or odors of gas (671).
- Steam, vapor, fog, or dust thought to be smoke.
- Smoke from barbecue or tar kettle (no hostile fire).
- 650 Steam, other gas mistaken for smoke, other.

EMS call where party has been transported

EMS call where injured party has been transported by a non-fire service agency or left the scene prior to arrival.

HazMat release investigation w/no HazMat found

- Hazardous material release investigation with no hazardous condition found. Includes odor of gas with no leak/gas found.
- Biological hazard investigation with no hazardous condition found.

Good intent call, other

600 Good intent call, other.

False Alarm and False Call

Malicious, mischievous false alarm

- Municipal alarm system, malicious false alarm. Includes alarms transmitted on street fire alarm boxes.
- Direct tie to fire department, malicious false alarm. Includes malicious alarms transmitted via fire alarm system directly tied to the fire department, not via dialed telephone.
- Telephone, malicious false alarm. Includes false alarms transmitted via the public telephone network using the local emergency reporting number of the fire department or another emergency service agency.
- 714 Central station, malicious false alarm. Includes malicious false alarms via a central-station-monitored fire alarm system.
- Local alarm system, malicious false alarm. Includes malicious false alarms reported via telephone or other means as a result of activation of a local fire alarm system.
- 710 Malicious, mischievous false alarm, other.

Bomb scare

721 Bomb scare (no bomb).

System or detector malfunction. Includes improper performance of fire alarm system that is not a result of a proper system response to environmental stimuli such as smoke or high heat conditions.

- Sprinkler activated due to the failure or malfunction of the sprinkler system. Includes any failure of sprinkler equipment that leads to sprinkler activation with no fire present. Excludes unintentional operation caused by damage to the sprinkler system (740 series).
- Extinguishing system activation due to malfunction.
- 733 Smoke detector activation due to malfunction.
- Heat detector activation due to malfunction.
- 735 Alarm system activation due to malfunction.
- 736 Carbon monoxide detector activation due to malfunction.
- 730 System or detector malfunction, other.

Unintentional system or detector operation (no fire). Includes tripping an interior device accidentally.

- D
- Sprinkler activation (no fire), unintentional. Includes testing the sprinkler system without fire department notification.
- Extinguishing system activation. Includes testing the extinguishing system without fire department notification.
- Smoke detector activation (no fire), unintentional. Includes proper system responses to environmental stimuli such as non-hostile smoke.
- Detector activation (no fire), unintentional. A result of a proper system response to environmental stimuli such as high heat conditions.
- 745 Alarm system activation (no fire), unintentional.
- 746 Carbon monoxide detector activation (no carbon monoxide detected). Excludes carbon monoxide detector malfunction.
- 740 Unintentional transmission of alarm, other.

Biohazard scare

751 Biological hazard, malicious false report.

False alarm and false call, other

700 False alarm or false call, other.

Severe Weather and Natural Disaster

- 811 Earthquake assessment, no rescue or other service rendered.
- Flood assessment. Excludes water rescue (360 series).
- Wind storm. Includes tornado, hurricane, or cyclone assessment. No other service rendered.
- Lightning strike (no fire). Includes investigation.
- 815 Severe weather or natural disaster standby.
- 800 Severe weather or natural disaster, other.

Special Incident Type

Citizen complaint

911 Citizen's complaint. Includes reports of code or ordinance violation.

Special type of incident, other

900 Special type of incident, other.

SECTION D

□ Aid Given or Received ☆

Definition

Aid given or received, either automatically (i.e., prearranged) or mutually for a specific incident. These actions are defined as:

Aid Received (automatic or mutual): A fire department handles an incident within its jurisdiction with additional manpower or equipment from one or more fire departments outside its jurisdiction. Aid received can be either mutual or automatic aid.

Aid Given (automatic or mutual): A fire department responds into another fire department's jurisdiction to provide assistance at an incident or to cover a vacated station while the receiving fire department is busy at an incident. Aid given can be either mutual or automatic aid.

Other Aid Given: A fire department covers and responds to another jurisdiction or locale that has no fire department.

No Aid: A fire department handles an incident within its jurisdiction without help from adjacent or outside fire departments.

Purpose

Aid information can be used to study response levels necessary to control various fire and emergency situations. It can be used to determine the adequacy of resources at the local level and the need for adjusting cooperative agreements. The Aid Given or Received entry serves as data control to ensure that the same incident is not counted more than once while still giving credit for activity performed by outside departments.

Entry

Check or mark the box indicating whether aid was given or received. If no aid was given or received, check or mark the None box.

Unless otherwise stipulated, whenever the following instructions indicate completion of the "Basic Module," the appropriate supporting and optional modules must also be completed.

Mutual/Automatic Aid Received: If either of these boxes is checked or marked, complete the Basic Module.

Mutual/Automatic Aid Given: If your department provided automatic or mutual aid to another fire department, check or mark the appropriate aid-given box; complete their FDID, their State, and their Incident Number fields; and complete the Basic Module through Block G1 (Resources). No other information is required for the Basic Module unless a fire service casualty occurs. In this case, you must also complete Block H1 (Casualties) and a Fire Service Casualty Module.

Other Aid Given: Check or mark this box if your department covers and responds to another jurisdiction or locale that has no fire department. Complete the Basic Module. In Section D, leave their FDID and their Incident Number fields blank; the State field is optional.

None: Check or mark this box if no mutual aid was involved.

If the receiving fire department completes the incident, then the giving department should complete the required portion of the module as needed for its own documentation of the incident. This can be particularly important for documenting fire service casualties.

Resources: If you give aid, you may choose to report your own resources as an option (Block G1). Similarly, if you receive aid, you may choose to count only your own resources or count your own resources plus those of the aid-giving department. If you include aid-received resources, check or mark the corresponding box.

Casualties: The aid-receiving department reports the details on all casualties other than the fire service casualties of the aid-giving department. Each department reports the details on its own fire service casualties.

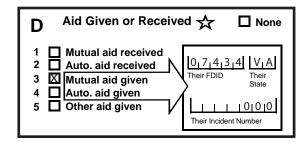
D

• It is critical to the reporting system that the aid-receiving departments always report the total number of civilian casualties associated with the incident.

Examples

Three examples given below illustrate aid entries.

- 1. A fire department receives automatic aid from another department in fighting a fire. The Gorman County Fire Department responded to a structure fire to assist the Buckley Fire & Rescue Department. Buckley FRD completes all required modules and checks the "Automatic aid received" box in Section D on the Basic Module.
- The equipment provided by the Gorman County FD may be listed in the Remarks section (L). For example, "Gorman County Fire Department: one pumper, one aerial ladder."
- The Gorman County FD completes Section A through Section G1 on the Basic Module. In Section D, check or mark the Automatic Aid Given box and indicate Buckley FRD's FDID, State, and incident number. If the incident number is unknown, then the Gorman County FD is required to complete the entire Basic Module.
- 2. A fire department sends apparatus and personnel to a nearby community to "fill-in" for its fire department. Buckley Fire & Rescue Department sent one pumper to fill-in at Station 13 in Gorman County FD's jurisdiction.
- If the Buckley FRD fill-in unit responded to an incident: Buckley FRD completes the Basic Module using Gorman County FD's FDID and Incident Number because, once they are in the Gorman station, it is the same as if they are Gorman fire department personnel.
- If Buckley FRD did not respond to an incident: Buckley FRD completes the Basic Module with the Action Taken (Section F) as "Fill-in, Standby" (code 92) using the Buckley FDID and Incident Number:
- 3. *A* fire department gives aid to another jurisdiction without a fire department. The Buckley Fire & Rescue Department covers the neighboring town of Dunnville, which has no fire protection services of its own.
- For each incident that Buckley FRD responds to in Dunnville, the Other Aid Given box should be checked or marked and the Basic Module completed.



AID GIVEN OR RECEIVED CODES

- 1 Mutual aid received from an outside fire service entity upon request from the initial responding department.
- 2 Automatic aid received. Includes a department receiving aid from an outside fire service entity that was dispatched automatically based on a prior agreement between two jurisdictions.
- 3 Mutual aid given to an outside fire service entity on request of the outside entity.
- 4 Automatic aid given. Includes departments automatically dispatched to give aid to an outside fire service entity based on a prior agreement between two jurisdictions.
- Other aid given. Includes a fire department responding to another jurisdiction or locale that has no fire department.
- N No aid given or received.

SECTION E

Section E collects the dates and times of when the alarm was received, when the units arrived on scene, when the incident was controlled, and when the last unit left the scene.

■ Dates and Times

All dates and times are entered as numerals. For time of day, the 24-hour clock is used. (Midnight is 0000.)

Alarm Time ☆

Definition

The actual month, day, year, and time of day (hour, minute, and (optional in on-line entry) seconds) when the alarm was received by the fire department. This is not an elapsed time.

The Alarm time is the same as the Incident Date (Section A), except if the incident is an exposure and the exposure occurs on a subsequent day.

Purpose

Alarm time is important for three reasons: (1) as a legal requirement for recording the precise time notification was made of the incident, (2) as information for determining the frequency of particular types of incidents by time period, and (3) as the starting time to determine the length of time taken to arrive at an incident and the total amount of time spent on the incident scene.

For all automated systems, NFIRS supports the collection of all times in seconds in addition to hours and minutes, although it is not required. Collection of seconds is usually used by fire departments using computer-aided dispatch.

Entry

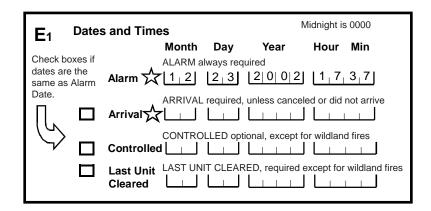
Enter the month, day, year (mm/dd/yyyy), and time to the nearest minute when the original alarm was received by the fire department.

01 January	04 April	07 July	10 October
02 February	05 May	08 August	11 November
03 March	06 June	09 September	12 December
12:00 midnight = 0000	12:01 a.m. = 0001	1:06 a.m. = 0106	2:20 p.m. = 1420

Ε

Example

The alarm was received at 5:37 p.m. on December 23, 2002:



Arrival Time ☆

Definition

The actual month, day, year, and time of day when the first responding unit arrived at the incident scene. This is not an elapsed time.

Purpose

This element reflects the time spent traveling to the scene of the incident. This information can be useful to fire department management in determining (1) the actual time spent at an incident and (2) any delay between alarm and arrival.

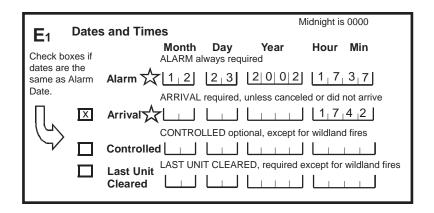
Entry

Enter the month, day, year (mm/dd/yyyy), and time that the first fire department unit arrived on the scene. If the date is the same as the Alarm date, check or mark the corresponding box; do not reenter the date.

■ If canceled on the way to a call (Incident Type 611), Arrival time is not required.

Example

The first responding units arrived at 5:42 p.m. on December 23, 2002:





Controlled Time

Definition

The actual month, day, year, and time of day when the fire is brought under control or the incident is stabilized and does not require additional emergency resources. "Controlled" is the time when the incident commander determines that the fire will not escape from its containment perimeter.

This is a required field for wildland fires.

Purpose

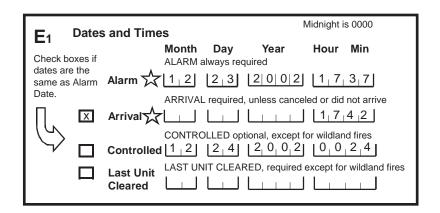
The time spent stabilizing a fire provides fire department management with the information needed to analyze the duration patterns of different types of fires. This can assist in determining service demand and costs for resource allocation.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the incident was controlled. If the date is the same as the Alarm date, check or mark the corresponding box; do not reenter the date. However, if the incident extended (from the Alarm time to the Controlled time) through midnight, do not check or mark the box; instead, enter the date.

Example

The fire was controlled at 12:24 a.m. on December 24, 2002:



Last Unit Cleared Time

Definition

The actual month, day, year, and time of day when the last unit cleared the incident scene. This is not an elapsed time.

Purpose

Combined with the previously recorded times, this element is valuable to fire department management in determining the actual time spent at an incident.

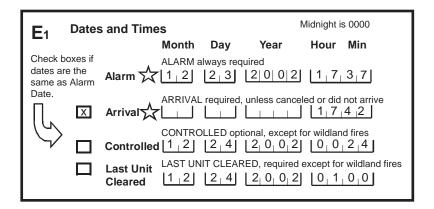
Ε

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the last unit cleared the scene. If the date is the same as the Alarm date, check or mark the corresponding box; do not reenter the date. However, if the incident extended (from the Alarm time to the Last Unit Cleared time) through midnight, do not check or mark the box; instead, enter the date.

Example

The last unit cleared at 1:00 a.m. on December 24, 2002:



■ Shift and Alarms

Shift or Platoon

Definition

Identifies the on-duty shift or platoon that responded to the incident. This applies only to fire departments with organized work force arrangements.

Purpose

Recording the shift that responded to an incident assists fire departments in determining workload balances and staffing requirements. This is a local option.

Entry

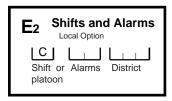
If your fire department uses this data element, enter the designation of the on-duty shift that responded to the incident. If the incident was of such duration that the shift changed during the control of the incident, record the shift change time and the designation of the new shift in the Remarks section (L).

Fire departments should establish and publish the codes or values to be used in this field.



Example

C Shift responds to an incident:



Alarms

Definition

The actual number of alarms transmitted for the incident. The definition of an alarm is determined at the local level.

Purpose

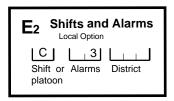
The number of alarms is one method of measuring incident severity. Knowing the number of alarms can be useful for local analysis of resource requirements. The number of alarms also may be related to mutual aid support. This is a local option.

Entry

If your fire department has a standard method of designating alarms, enter the number of alarms required for this incident.

Example

A three-alarm fire in a business district:



District

Definition

An area identified by the fire department that is useful for administrative purposes.

Purpose

Fire departments can develop their own method of locating the frequency and severity of incidents by district. District numbers may identify specific townships, contract service areas, political wards, station response areas, inspection or administrative districts, or any other boundary a department may wish to use. This data element can be a powerful tool for local use. This is a local option.

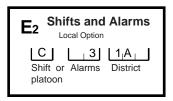
Ε

Entry

Enter the fire department-assigned District number where the incident occurred. These positions can contain any combination of letters or numbers as designated by your fire department.

Example

The fire occurred in Station 1A's first due area:



Special Studies

Definition

Temporary data elements that can be used for collection of information that is of special interest for a defined period. Special studies are typically required to capture information on emerging trends, problem areas, or a specific issue being studied. When the answer becomes known through the special study, the collection of that field is no longer required. If the data will always be needed for permanent collection, a State- or department-defined permanent user field should be created and used instead of the Special Studies field. A State, a fire department, or the NFDC can define special studies.

Special Study ID Number: This number uniquely identifies each special study that is being run by the fire department, State, or NFDC.

Special Study Value: The value in the field being collected. Responses for special studies can be defined as codes or as alphanumeric entries of numeric values or dates. States, fire departments, and the NFDC can define Special Studies fields.

Purpose

The use of special studies allows departments, States, and the NFDC to quickly collect information on an issue or problem and to answer a specific question through the temporary use of a special study field over a defined period of time. This is a State or local option.

Entry

If you are participating in a Special Study, your entry will depend on the type of data being collected. Use the codeset defined for the particular Special Study field if it is a coded entry. The data entered may also be a date or a numeric entry if the field has been so defined. Additional Special Study fields are available on the Supplemental Form (NFIRS–1S).

SECTION F

■ Actions Taken ☆

Actions Taken was known as Type of Action Taken in NFIRS 4.1.

Definition

The duties performed at the incident scene by the responding fire department personnel.

Purpose

These data elements, together with Incident Type, enable a fire department to document the breadth of activities and the resources required by the responding fire department to effectively handle the incident. This information also provides some indication of the specific types of services provided by the fire department.

Entry

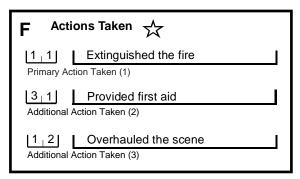
The Actions Taken field(s) is required for all incidents where actions were taken, including "investigation only." Enter the two-digit codes and descriptions for up to three of the most significant actions taken at the scene of the incident. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service.

Be as specific as possible in stating the action taken. The Additional Action Taken fields are optional. If this is a HazMat incident and the HazMat Module is being completed, list the non-HazMat actions taken in this field and the Actions Taken specific to handling the hazardous materials incident in the HazMat Module.

- The Primary Action Taken is the most significant action taken by the fire department at the scene (i.e., use the code with the lowest numerical value). This is a required field.
- When canceled en route, enter code 93, "Canceled en route;" in the case, the Incident Type (Section C) must be code 611.

Example

The fire department extinguished the fire (11), provided first aid to a fire victim (31), and overhauled the fire scene (12):



F

ACTIONS TAKEN CODES

Fire Control or Extinguishment

- 11 Extinguishment by fire service personnel.
- 12 Salvage and overhaul.
- Establish fire lines around wildfire perimeter. Includes clearing firebreaks using direct, indirect, and burnout tactics as appropriate.
- 14 Contain fire (wildland). Includes taking suppression action that can reasonably be expected to check the fire spread under prevailing and predicted conditions.
- 15 Confine fire (wildland). Includes when fire crews or resources stop the forward progress of a fire but have not put in all control lines.
- 16 Control fire (wildland). Includes when fire crews or resources completely surround the fire perimeter with control lines; extinguish any spot fires; burn any area adjacent to the fire side of the control lines; and cool down all hot spots that are immediate threats to the control line, until the lines can reasonably be expected to hold under foreseeable conditions.
- 17 Manage prescribed fire (wildland).
- Fire control or extinguishment, other.

Search and Rescue

- 21 Search for lost or missing person. Includes animals.
- Rescue, remove from harm. Excludes vehicle extrication (23).
- 23 Extrication or disentangling of a person. Excludes body recovery (24).
- 24 Recover body or body parts.
- 20 Search and rescue, other.

EMS and Transport

- 31 Provide first aid and check for injuries. Medical evaluation of patient.
- 32 Provide basic life support (BLS).
- 33 Provide advanced life support (ALS).
- 34 Transport of person from scene in fire service ambulance or apparatus.
- 30 Emergency medical services, other.

Hazardous Condition

- 41 Identification, analysis of hazardous materials.
- Hazardous materials detection, monitoring, sampling, and analysis using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.
- Hazardous materials spill control and confinement. Includes confining or diking hazardous materials. These are actions taken to confine the product released to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.
- Hazardous materials leak control and containment. Includes actions taken to keep a material within its container, such as plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.
- 45 Remove hazard. Includes neutralizing a hazardous condition.
- Decontaminate persons or equipment. Includes actions taken to prevent the spread of contaminants from the "hot zone" to the "cold zone." This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.
- Decontamination of occupancy or area exposed to hazardous materials.
- 48 Remove hazardous materials. Includes a broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.
- 40 Hazardous condition, other.

Fires, Rescues, and Hazardous Conditions

- 51 Ventilate. Includes nonhazardous odor removal and removal of smoke from nonhazardous materials-related fires.
- Forcible entry, performed by fire service. Includes support to law enforcement.
- Evacuate area. Removal of civilians from an area determined to be hazardous. Includes actions taken to isolate the contaminated area and/or evacuate those persons affected by a hazardous materials release or potential release.
- Determine if the materials released are nonhazardous through product identification and environmental monitoring.
- Establish safe area. Includes isolating the area affected by denying entry to unprotected persons and establishing hazard control zones (hot, warm, cold).
- 56 Provide air supply.
- 57 Provide light or electrical power.
- 58 Operate apparatus or vehicle.
- Fires, rescues, and hazardous conditions, other.

Systems and Services

- 61 Restore municipal services. Includes turning water back on and notifying the gas company to turn the gas on.
- Restore sprinkler or fire protection system.
- Restore fire alarm system. Includes restoring fire alarm systems monitored by the fire service.
- 64 Shut down system. Includes shutting down water, gas, and fire alarm systems.
- 65 Secure property. Includes property conservation activities such as covering broken windows or holes in roofs.
- Remove water or control flooding condition.
- 60 Systems and services, other.

Assistance

- Assist physically disabled. Includes providing nonmedical assistance to physically disabled, handicapped, or elderly citizens.
- Assist animal. Includes animal rescue, extrication, removal, or transport.
- Provide manpower. Includes providing manpower to assist rescue/ambulance units lift patients or providing manpower to assist police.
- 74 Provide apparatus.
- 75 Provide equipment, where equipment is used by another agency.
- Provide water. Includes tanker shuttle operations and pumping in a relay or from a water source. Excludes normal fire suppression operations.
- 77 Control crowd. Includes restricting pedestrian access to an area. Excludes control of vehicles (78).
- 78 Control traffic. Includes setting up barricades and directing traffic.
- Assess damage from severe weather or the results of a natural disaster.
- 70 Assistance, other.

Information, Investigation, and Enforcement

- 81 Incident command. Includes providing support to incident command activities.
- 82 Notify other agencies. Includes notifications of utility companies, property owners, and the like.
- Provide information to the public or media.
- 84 Refer to proper authority. Includes turnover of incidents to other authorities or agencies such as the police.
- 85 Enforce fire code and other codes. Includes response to public complaints and abatement of code violations.
- Investigate. Includes investigations done on arrival to determine the situation and post-incident investigations; and collecting incident information for incident reporting purposes.
- 87 Investigate. Fire out on arrival.
- 80 Information, investigation, and enforcement, other.

Fill-in, Standby

- 91 Fill in, move up to another fire station.
- 92 Standby.
- 93 Canceled en route.
- 00 Actions taken, other.
- 90 Fill-in, standby, other.

SECTION G

Section G collects data on the number of personnel and equipment used for suppression, EMS, etc., in the response to a specific incident.

Resources ☆

Definition

The total complement of fire department personnel and apparatus (suppression, EMS, other) that responded to the incident. This includes all fire and EMS personnel assigned to the incident whether they arrived at the scene or were canceled before arrival.

Purpose

This information is used to determine actual personnel and apparatus requirements for different types of incidents and for different levels of incident severity. This data element may be examined with respect to casualties and damage estimates.

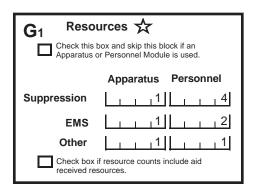
Entry

Enter the total number of fire department personnel and apparatus that responded to the incident for the Suppression, EMS, and Other fields. If the Apparatus or Personnel Modules are used, check or mark the appropriate box (top) and skip this section. If these personnel and apparatus counts include mutual aid resources, check or mark the box at the bottom of Block G1.

Chief officer vehicles and privately owned vehicles should be counted as "Other." The personnel arriving in these vehicles should be counted according to their primary assignment at the incident.

Example

Four firefighters (one engine), two EMS personnel (one ambulance), and one incident commander (one car) responded to an incident:



Estimated Dollar Losses and Values

Definition

Estimates of the total property and contents dollar loss and the pre-incident value of the property and contents.

• An estimate of the property and contents dollar loss is required for all fires where the value is known.

Losses: Rough estimation of the total loss to the structure and contents, in terms of the cost of replacement in like kind and quantity. This estimation of the fire loss includes contents damaged by fire, smoke, water, and overhaul. This does not include indirect loss, such as business interruption.

Pre-incident Value: Estimation of the replacement cost of the structure and contents.

Purpose

Collecting property and content losses illustrates the magnitude of the fire problem, provides an additional indicator of the incident severity, and can be used to evaluate progress in fire protection. This information can help local communities, States, and the country determine the amount of money that should be spent on fire protection.

Estimated property and content losses are also crucial for identifying types of situations where high monetary losses are common. This information helps target fire prevention programs. Loss estimates also can be used to evaluate the cost effectiveness of various equipment and fire protection practices.

Pre-incident values help delimit the magnitude of the potential fire problem by providing a basis for comparison.

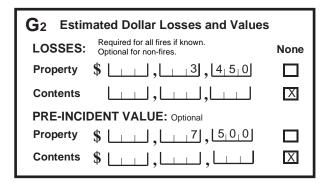
Entry

Enter the best estimates of dollar losses (required for all fires when obtainable) and pre-incident values (local option) that are practical to make or obtain. Monetary losses should be estimated as accurately as possible, though it is understood that the estimates may be rough approximations. If there was no loss or no pre-incident value, check or mark the appropriate None boxes.

- In making this entry, use only whole dollars; do not include cents.
- A better estimate of losses for a fire often becomes available after the incident report is submitted. Revision of the original estimate should be made as a change entry when better information becomes available, especially for large fires.

Example

The estimated dollar loss was \$3,450; the estimated pre-incident value was \$7,500:



COMPLETED MODULES

This area of the Basic Module is used to determine the totality of all the modules submitted for a specific incident. It acts as a checklist for completed modules under the paper form system.

Definition

Listing of NFIRS–2 through NFIRS–11 modules completed for the incident.

Purpose

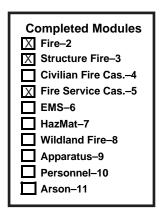
This section is for paper form management to ensure receiving authorities that the incident package is complete. It also serves as a reminder to the responder as to which modules must be completed.

Entry

Check or mark all the Completed Module boxes that apply to the incident.

Example

A fire department responded to fire in an apartment building; one firefighter was injured. Three additional forms will be attached to the Basic Module: Fire, Structure Fire, and Fire Service Casualty



SECTION H

Section H captures information on the number of civilians and firefighters injured or killed as a result of the incident. Other information in this section relates to whether a detector alerted occupants in a structure and whether hazardous materials were released.

™ Casualties ☆

Definition

A person injured or killed either as a result of the incident or during the mitigation of the incident. An injury is physical damage to a person that requires either (1) treatment by a practitioner of medicine within 1 year of the incident, or (2) at least 1 day of restricted activity immediately following the incident. Deaths also include people who die within 1 year because of injuries sustained from the incident.

Either the None box is checked or marked or the number of casualties is entered.

Civilians include emergency personnel who are not members of the fire department, such as police officers or utility workers.

Purpose

This information can be correlated with occupancy type, structural conditions, and other data to help understand how to reduce future fire injuries and deaths. Furthermore, this information can be used to reduce firefighter injuries and deaths through better equipment, training, and physical conditioning.

Entry

Identify and separately record the number of fire service personnel and the number of civilians or other non-fire department personnel killed or injured as a result of the incident. Check the None box if there were no civilian or fire service personnel casualties.

Fire Service Deaths: Enter the number of fire service personnel from your department who died in connection with this incident regardless of incident type. A Fire Service Casualty Module must be completed for each individual counted here.

Fire Service Injuries: Enter the number of fire service personnel from your department who were injured (but did not die) in connection with this incident regardless of incident type. A Fire Service Casualty Module must be completed for each individual counted here.

- Include those people injured or killed while responding to or returning from the incident. If the injury or death occurred on fire department property after the apparatus was placed back in service, do not include it in this section.
- On-duty firefighter injuries or deaths that did not occur during an incident may be collected using the Fire Service Casualty Module. Remember when reporting a firefighter casualty of this type, the Basic Module must still be filled out, complete with an incident number. In this event, create an EMS incident with the appropriate response information.

Н

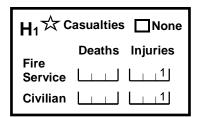
Civilian Deaths: Enter the number of civilians or non-fire department personnel who died in connection with this incident. Enter only fire-related deaths here. For HazMat deaths, enter the number in Section P of the HazMat Module when that optional module is selected by your State reporting authority. A Civilian Casualty Module must be completed for each individual counted here.

Civilian Injuries: Enter the number of civilians or non-fire department personnel who were injured (but did not die) in connection with this incident. Enter only fire-related injuries here. For HazMat injuries, enter the number in Section P of the HazMat Module when that optional module is selected by your State reporting authority. The Civilian Casualty Module must be completed for each individual counted here.

EMS civilian deaths or injuries are not entered on either the Basic or the HazMat Modules.

Example

One civilian and one firefighter were injured at the scene of a tractor-trailer accident:



Detector

Definition

The presence in the general area of fire origin of one or more detectors that was within the operational range of the detector(s) at the time of an incident.

■ This is required for all confined fires (Incident Type codes 113–118, Section C).

Purpose

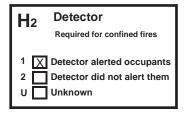
The information on whether or not a detector alerted the occupants of a structure to an emergency is important for understanding fire control and life safety with and without detection equipment.

Entry

Check or mark the box if a detector alerted the occupants in this incident (regardless of whether the detector was smoke, heat, carbon monoxide, etc.). This block can be left blank for non-fire incidents, and can optionally be used for a carbon monoxide (CO) incident and whether a CO detector operated.

Example

Burning food on the stove set off the smoke detector and alerted the occupants:



DETECTOR CODES

- 1 Detector alerted occupants.
- 2 Detector did not alert occupants.
- U Unknown.

Hazardous Materials Release

Definition

The occurrence and nature of a hazardous material release at the incident.

Purpose

This element provides information on whether or not hazardous materials were released at the incident, what the materials were, and whether the HazMat Module should be completed. This allows fire departments to document releases of hazardous materials as minor spills that occur in the everyday environment without the need to complete the HazMat Module.

Entry

Check or mark the box best describing the type of spill or release that occurred at the incident. If no hazardous materials were involved or no HazMat release, check or mark the None box. Complete the HazMat Module if special HazMat actions were required, including the need for special protective clothing or equipment, or if the spill was equal to or greater than 55 gallons.

Example

Gasoline was leaking from the car involved in a motor vehicle accident:

Natural gas: slow leak, no evacuation or HazMat actions Propane gas: <21-lb tank (as in home BBQ grill) Gasoline: vehicle fuel tank or portable container Kerosene: fuel burning equipment or portable storage Diesel fuel/fuel oil: vehicle fuel tank or portable storage Household solvents: home/office spill, cleanup only Motor oil: from engine or portable container Paint: from paint cans totaling <55 gallons Other: special HazMat actions required or spill > 55 gal (Please complete the HazMat form.)	H ₃ Hazardous Materials Release □None
	Propane gas: <21-lb tank (as in home BBQ grill) Gasoline: vehicle fuel tank or portable container Kerosene: fuel burning equipment or portable storage Diesel fuel/fuel oil: vehicle fuel tank or portable storage Household solvents: home/office spill, cleanup only Motor oil: from engine or portable container Paint: from paint cans totaling <55 gallons Other: special HazMat actions required or spill > 55 gal

HAZARDOUS MATERIALS RELEASE CODES

- Natural gas, slow leak, no evacuation or HazMat actions taken.
- 2 Propane gas, less than a 21-pound tank (as in home BBQ grill).
- Gasoline, vehicle fuel tank or portable container. Includes leaks or releases from equipment tanks where the release is less than 55 gallons.
- 4 Kerosene, fuel-burning equipment or portable storage container less than 55 gallons.
- 5 Diesel fuel or fuel oil, vehicle fuel tank or portable storage container less than 55 gallons.
- 6 Household/Office solvent or chemical spill. Includes spills of mineral spirits, acetone, and turpentine. Cleanup only.
- 7 Motor oil from engine or portable container less than 55 gallons.
- 8 Paint from paint cans less than 55 gallons.
- Other special HazMat actions were required or the spill was equal to or greater than 55 gallons. Complete the HazMat Module.
- N No HazMat involved.

SECTION I

■ Mixed Use Property

Mixed Use Property is similar to Complex in NFIRS 4.1.

Definition

This data element captures the overall use of a property. If a property has two or more uses, then the Mixed Use Property designation applies.

Purpose

Documenting an incident that occurs on a property with more than one use is important to better identify the overall or main use of the property in which emergency incidents occur. Knowing the overall property use allows for better analysis of incident causes and targeting of prevention strategies. It also is important information for use in code development and enforcement as well as for inspection activities.

Entry

If the property is of mixed use, check or mark the box best describing the overall use of the property where the incident occurred. Check or mark the appropriate box even if the incident did not involve the entire complex (for example, a single store in a row of stores). If it is not a mixed use property, check or mark the Not mixed box.

For example, a restaurant in an office building would be a structure with two or more property uses, assembly use and office use. The Mixed Use Property designation would be office use (code 59). A warehouse on the property of an amusement park would have a designation of assembly use (10). A stand-alone service station would not be a Mixed Use although it has a driveway and parking area.



Example

An electrical fire in the store of a hotel lobby (40):

I	_	ed Use Not mixed
	10	Assembly Use
	20	Education use
	33	Medical use
	40	X Residential use
	51	Row of stores
	53	Enclosed mall
	58	Business & residential
	59	Office use
	60	Industrial use
	63	Military use
	65	☐ Farm use
	00	Other mixed use

MIXED USE PROPERTY CODES

- Assembly use. Places for the gathering of people for amusement, recreation, social, religious, civic, patriotic, travel, and similar purposes. The occupants are present voluntarily and for a limited duration.
- Educational use. Properties used for the gathering of groups of persons for purposes of instruction. These occupancies differ from assembly occupancies in that persons are present regularly and under some control or discipline.
- Medical use. Properties dedicated to health care, including hospitals, treatment centers, clinics, and doctor's office buildings. Medical complexes include facilities for psychological and physical care.
- 40 Residential use. A property in which sleeping accommodations are furnished. Accommodations may be permanent, as in an apartment; transient, as in a hotel; or temporary, as in a dormitory or barracks.
- Row of stores. Includes strip malls. Excludes enclosed malls (53).
- Enclosed mall. A shopping center with multiple stores sharing a common, enclosed area. The principal use is for retail trade, with incidental other uses such as office and business. Excludes strip malls (51).
- Business and residential properties containing a mixture of commercial activity with residential uses. Includes mixed-use developments and apartments with first-floor retailing.
- Office use. Office properties are those used primarily for the transaction of business and the keeping of records. Includes those with incidental retail sales or eating establishments.
- Industrial use. Properties characterized by the mechanical, chemical, or electromagnetic transformation of inorganic or organic substances into new products via machinery or by hand. Includes the assembly of component parts to produce finished or intermediate goods for further processing.
- Military use. Any property under the regular control of the U.S. military or authorized State militias. Includes military bases, training centers, armories, and related facilities.
- Farm use. Included are croplands, orchards, and livestock production.
- 00 Mixed use, other.
- NN Not mixed use. Incident property consists of a single use.

SECTION J

Property Use

Property Use was known as Fixed Property Use in NFIRS 4.1.

Definition

Each individual property has a specific use, whether a structure or open land. This entry refers to the actual use of the property where the incident occurred, not the overall use of mixed use properties of which the property is part (see Mixed Use Property, Section I). The intent of this entry is to specify the property use, not the configuration of the building or other details of the property.

Purpose

This element permits analyses of differing fire problems that occur on a wide range of property types. Information on the frequency, losses, and types of fires for each property use can assist in targeting fire prevention programs and fire protection or suppression systems for each type of property. It often assists in ordering priorities for inspection, developing new building codes, and evaluating the success of programs directed at particular types of properties.

Entry

Check or mark the box best describing the specific property use. If the property use is not listed in Section J of the paper form, look up the specific property use code and enter the appropriate three-digit code and the code's description. If no property was involved in the incident (e.g., Incident Type code 611), check or mark the None box.

- If the property is a structure that is under construction, select the use for which it will be used. This is not applicable to construction site incidents (code 981). If the structure is vacant or being demolished, select its last significant use.
- Property that is mobile or in transit is reported separately, and the property it is located on at that time is reported in this entry box. If the mobile property is not in transit, indicate its current location. The most common property use classifications for structures and outside property are listed.
- Mobile homes. Use code 419 for mobile homes used primarily as fixed residences. Incident Type code 121 (Section C) should have been used to indicate that this was a fire in a mobile home used as a fixed residence. If the mobile home is in transit, use the code describing the property where the mobile home is located at the time of the incident.
- If the Property Type is in the 400 series, Block B1, Estimated Number of Residential Living Units in the Building on the Fire Module must be completed.
- Property Type 500s, 600s, 700s, or 800s. If the property use code falls in the 500, 600, 700, or 800 series, the On-Site Materials field (Section C) on the Fire Module must be completed.



Example

Fire in a small electronics warehouse (891)

J Property Use ☆ □ None Structures 131 □ Church, place of worship 161 □ Restaurant or cafeteria 162 □ Bar/Tavern or nightclub 213 □ Elementary school, kindergarten 215 □ High school, junior high 241 □ College, adult education 311 □ Nursing home 331 □ Hospital	341	539 Household goods, sales, repairs 571 Gas or service station 579 Motor vehicle/Boat sales/repairs 599 Business office 615 Electric-generating plant 629 Laboratory/Science laboratory 700 Manufacturing plant 819 Livestock/Poultry storage (barn) 882 Non-residential parking garage 891 Warehouse
Outside 124 Playground or park 655 Crops or orchard 669 Forest (timberland) 807 Outdoor storage area 919 Dump or sanitary landfill 931 Open land or field	936	981 Construction site 984 Industrial plant yard Look up and enter a Property Use code and description only if you have NOT checked a Property Use box. Property Use Description

The above example requires completion of Section C, On-Site Materials or Products, on the Fire Module. There, code 712 would be entered as the On-Site Material; Electronics Parts would be entered as the description; and the code 1 box indicating Bulk Storage or Warehousing would be checked or marked.

An alphabetized synonym list for the following Property Use codes is presented in Appendix B.

PROPERTY USE CODES

Assembly	
111	Bowling establishment.
112	Billiard center, pool hall.
113	Electronic amusement center. Includes video arcades and the like.
114	Ice rink. Includes indoor or outdoor facilities for use exclusively as ice rinks. Excludes combination ice rinks/
	basketball or other uses (123).
115	Roller rink. Includes indoor or outdoor facilities for use exclusively as roller skating rinks or skateboard parks.
	Excludes facilities with multiple uses (123).
116	Swimming facility. Includes indoor or outdoor swimming pools, related cabanas, bathhouses, and equipment
	locations.
110	Fixed-use recreation places, other. Includes miniature golf courses, driving, and batting ranges.
121	Ballroom, gymnasium. Includes dance halls, basketball courts, indoor running tracks.
122	Convention center, exhibit hall. Includes large open hall without fixed seating, such as convention center,
	exhibit hall, armory hall, and field house.
123	Stadium, arena. Includes fixed seating in large areas, such as ballpark, football stadium, grandstand, and race
	track.
124	Playground or outdoor area with fixed recreational equipment.
129	Amusement center, indoor/outdoor. Includes carnivals, circuses. Excludes video arcades (113).
120	Variable-use amusement, recreation places, other.
131	Church, mosque. Includes synagogues, temples, chapels, religious educational facilities, and church halls.
134	Funeral parlor. Includes crematoriums, mortuaries, morgues, and mausoleums.

- 130 Places of worship, funeral parlors, other.
- 141 Athletic or health club. Includes YMCA or YWCA, lodge, swimming, and baths. If sleeping facilities are included, use 449.
- 142 Clubhouse associated with country club that includes golf, tennis, hunting, fishing, and riding activities.
- Yacht club. Includes boating and yacht club facilities. Excludes marinas, boat mooring facilities (898); boat repair/refueling facilities (571); or boat sales, services, and repairs (579).
- Casino, gambling clubs. Includes bingo halls. Use only where primary use is for gambling.
- 140 Clubs, other.
- 151 Library.
- Museum. Includes art galleries, planetariums, and aquariums.
- 154 Memorial structure. Includes monuments and statues.
- 155 Courthouse. Includes courtrooms.
- 150 Public or government, other.
- Restaurant or cafeteria. Places specializing in on-premises consumption of food. Includes carryout and drivethrough restaurants.
- Bar, nightclub, saloon, tavern, pub.
- 160 Eating, drinking places, other.
- 171 Airport passenger terminal. Includes heliports.
- 173 Bus station.
- Rapid transit station. Includes subway stations, rail stations, light rail stations, monorail stations, and the like.
- 170 Passenger terminal, other.
- 181 Live performance theater.
- 182 Auditorium, concert hall.
- Movie theater. Includes facilities designed exclusively for showing motion pictures.
- 185 Radio, television studio.
- Film/Movie production studio. For film processing facilities, use (700). On the Fire Module, use Onsite Materials (714).
- 180 Studio, theater, other.
- 100 Assembly, other.

Educational

- 210 Schools, non-adult, other.
- 211 Preschool, not in same facility with other grades. Includes nursery schools. Excludes kindergartens (213) and daycare facilities (254, 255).
- 213 Elementary school. Includes kindergarten.
- 215 High school, junior high, middle school.
- Adult education center, college classroom. Includes any building containing adult education classrooms. The building may include other uses incidental to teaching.
- Day care in commercial property.
- Day care in residence, licensed.
- Day care in residence, unlicensed.
- 200 Educational, other.

Health Care, Detention, and Correction

- Nursing homes licensed by the State, providing 24-hour nursing care for four or more persons.
- Mental retardation/development disability facility that houses, on a 24-hour basis, four or more persons.
- Alcohol or substance abuse recovery center where four or more persons who are incapable of self-preservation are housed on a 24-hour basis.
- Asylum, mental institution. Includes facilities for the criminally insane. Must include sleeping facilities.
- Hospital: medical, pediatrics, psychiatric. Includes hospital-type infirmaries and specialty hospitals where treatment is provided on a 24-hour basis.
- Hospices. Includes facilities where the care and treatment of the terminally ill is provided on a 24-hour basis.
- Clinic, clinic-type infirmary. Includes ambulatory care facilities. Excludes facilities that provide overnight care (331).
- Doctor, dentist, or oral surgeon office.

- 343 Hemodialysis unit, free standing, not a part of a hospital.
- Clinics, doctors' offices, hemodialysis centers, other.
- Jail, prison (not juvenile). Excludes police stations (365) or courthouses (153) where a jail is part of the facility.
- Reformatory, juvenile detention center.
- 365 Police station.
- Health care, detention, and correction, other. Includes animal care.

Residential

- 1- or 2-family dwelling, detached, manufactured home, mobile home not in transit, duplex.
- 429 Multifamily dwelling. Includes apartments, condos, townhouses, rowhouses, tenements.
- Boarding/Rooming house. Includes residential hotels and shelters.
- 449 Hotel/Motel, commercial.
- Residential board and care. Includes long-term care facilities, halfway houses, and assisted-care housing facilities. Excludes nursing facilities (311).
- Dormitory-type residence, other.
- Sorority house, fraternity house.
- Barracks, dormitory. Includes nurses' quarters, military barracks, monastery/convent dormitories, bunk houses, workers' barracks.
- 400 Residential, other.

Mercantile, Business

- 511 Convenience store. Excludes service stations with associated convenience stores (571).
- Food and beverage sales, grocery store. Includes supermarkets, specialty food stores, liquor stores, dairy stores, and delicatessens.
- Textile, wearing apparel sales. Includes clothing, shoes, tailor furs, and dry goods shops.
- Household goods, sales, repairs. Includes furniture, appliances, hardware, paint, wallpaper, music, and video stores.
- Specialty shop. Sale of materials commonly used in the home, such as books, stationery, newspapers, tobacco, licit drugs, jewelry, leather goods, flowers, optical goods. Excludes liquor stores (519).
- Personal service. Includes barber and beauty shops.
- Recreational stores. Includes hobby supply, sporting goods, toy, pet, photographic supply, garden supply, lumber, and fireworks stores and sales.
- Laundry, dry cleaning. Includes self-service facilities.
- Professional supplies, services. Includes art supply, home maintenance service, and linen supply firms.
- Service station, gas station. Includes LP-gas stations with associated convenience stores and boat refueling stations. Excludes vehicle sales (579).
- Motor vehicle or boat sales, services, repair. Includes facilities that have incidental fuel dispensing.
- Department or discount store. Includes stores selling a wide range of items that cannot readily be classified, such as mall kiosks, drug stores, and discount buying club stores that require memberships.
- 580 General retail, other.
- Bank. Includes ATM kiosks when not part of another structure.
- Office: veterinary or research. Excludes laboratories (629).
- 596 Post office or mailing firms.
- Business office. Includes engineering, architectural, and technical offices. Excludes military offices (631).
- Mercantile, business, other.

Industrial, Utility, Defense, Agriculture, Mining

- 614 Steam- or heat-generating plant.
- Electric-generating plant, regardless of fuel source. Includes power generation for public or private use, power generation for rail transport, and nuclear powerplants that generate electrical power.
- Energy production plant, other.
- Laboratory or science laboratory. Includes chemical, medical, biological, physical materials testing, psychological, electronics, and general research laboratories. Also includes classrooms and offices incidental to laboratory facilities. Minor laboratory areas incidental to operations in another property should be considered part of the predominating property.
- Defense, military installation.

- Flight control tower.
- 635 Computer center. Includes computer laboratories.
- 639 Communications center. Includes radio, TV, and telecommunications facilities.
- 642 Electrical distribution. Includes electrical substations, transformers, and utility poles.
- 644 Gas distribution, gas pipeline.
- Flammable liquid distribution system, flammable liquid pipeline.
- Water utility. Includes collection, treatment, storage, and distribution of water.
- 648 Sanitation utility. Includes incinerators and industrial rubbish burners. Excludes dumps and landfills.
- Utility or distribution system, other.
- 655 Crops or orchard. Includes plant nurseries and greenhouses as well as the processing or packaging of agricultural crops or fruit that occurs on the property.
- Livestock production. Includes milking facilities, poultry and egg production, and fish hatcheries. Excludes crops or orchard (655), meat, and milk processing plants.
- Forest, timberland, woodland. Includes standing timber without logging operations; wildlife preserves; timber tracts where planting, replanting, and conservation of forests are conducted; and areas where uncultivated materials such as wild rubber, barks, and roots are gathered. Also includes facilities for extracting, concentrating, and distilling of such materials when the facilities are located within the forest. Excludes grasslands and brush (931).
- Mine, quarry. Mining and quarrying of raw and natural materials. Includes underground and surface mines, gravel pits, oil wells, coal mines, ore mines, salt mines, chemical mines, stone and gravel quarries, mineral mines, peat mines, natural gas wells, and the like.
- 600 Industrial, utility, defense, agriculture, mining, other.

Manufacturing, Processing

Manufacturing, processing. Properties where there is mechanical or chemical transformation of inorganic or organic substances into new products. Includes factories making products of all kinds and properties devoted to operations such as processing, assemblies, mixing, packing, finishing or decorating, and repairing.

Storage

- 807 Outside material storage area.
- 808 Outbuilding or shed. Includes tool and contractor sheds. Excludes contractor field offices (599).
- 816 Grain elevator, silo.
- Livestock, poultry storage. Includes barns, stockyards, and animal pens.
- 839 Refrigerated storage. Includes storage lockers.
- 849 Outside storage tank.
- Vehicle storage, other. Includes airplane and boat hangars. Excludes parking garages (881, 882).
- Parking garage, detached residential garage. Includes detached parking structures associated with multifamily housing. If the garage is attached to the residence, use the 400 series.
- Parking garage, general vehicle. Includes bus, truck, fleet, or commercial parking structures.
- Fire station.
- Warehouse. Includes all general storage facilities. Excludes refrigerated storage (839).
- 898 Dock, marina, pier, wharf. Includes associated passenger facilities.
- Residential storage or self-storage units. Includes mini-storage units.
- 800 Storage, other.

Outside or Special Property

- Dump, sanitary landfill. Includes recycling collection points.
- 921 Bridge, trestle.
- 922 Tunnel.
- Outbuilding, protective shelter. Includes toll booths, weather shelters, mailboxes, telephone booths, privies, charitable collection boxes, and aerial tramways. Excludes parking garages.
- 931 Open land or field. Includes grasslands and brushlands. Excludes crops or areas under cultivation.
- 935 Campsite with utilities. Includes parks for camping trailers or recreational vehicles.

936	Vacant lot. Undeveloped land, not paved, may include incidental untended plant growth or building material or debris.
937	Beach.
938	Graded and cared-for plots of land. Includes parks, cemeteries, golf courses, and residential yards.
941	Open ocean, sea, or tidal waters. Includes ports. Excludes piers and wharves (898).
946	Lake, river, stream.
940	Water area, other.
951	Railroad right-of-way. Includes light rail or rapid transit when their right-of-way usage is exclusive (i.e., not part of the street).
952	Railroad yard, switch or classification area.
961	Highway or divided highway. Includes limited-access highways with few intersections or at grade crossings.
962	Residential street, road, or residential driveway.
963	Street or road in commercial area.
965	Vehicle parking area. Excludes parking garages (882). Includes paved non-residential driveways.
960	Street, other.
972	Aircraft runway.
973	Aircraft taxiway. Includes all aircraft operation areas other than runways and aircraft loading areas (974).
974	Aircraft loading area. Includes helipads and helistops.
981	Construction site. Excludes buildings under construction or demolition. Buildings or structures under
	construction or demolition should be classified by their proposed or former use.
982	Oil or gas field.
983	Pipeline, power line, or other utility right-of-way.
984	Industrial plant yard area, not outdoor storage.
900	Outside or special property, other.
000	Property use, other.
NNN	None.
TITITI	Undetermined

SECTION K

The entries for Section K are for identifying both the property occupant and the property owner involved in the incident. One completed example is presented at the end of Block K1 that shows all the field entries for both Blocks K1 and K2.

Person/Entity Involved

Business Name

Definition

The full name of the company or agency occupying, managing, or leasing the property where the incident occurred.

Purpose

This element provides a basis for long-term analysis in recognizing patterns of repeated fires in the same or different locations over a period of time. The business name is required at the local government level to establish an official document of record.

Entry

Enter the full name of the company or agency occupying the property where the incident occurred. This may or may not be the same as the owner.

K

Example

A fire in the rear office of Rex Associates.

Telephone

Definition

The telephone number of the person or entity involved in the incident.

Purpose

This field collects additional information on the person or entity involved, which may be required at a later

Entry

Enter the area code and telephone number in the spaces provided.

Example

Rex Associates' telephone number is (828) 867–5309.

Person Involved

Definition

The full name of the person involved in the incident. If an entity, enter the name under Business Name at the top of Block K1.

Purpose

This information provides a basis for long-term analysis in recognizing patterns of repeated incidents in the same or different locations over a period of time. The name of the person involved is required at the local government level to establish an official document of record.

Entry

Enter the full name of the person as normally written. Enter the name using the format: prefix, first name, middle initial, last name, and suffix. If the name is unknown, several available resources may be checked for this information, such as street directory publications, utility company records, or other public agencies. Leave blank if unknown. Name prefixes and suffixes are as follows:

Name Prefix		Name	Name Suffix		
MR	Mr.	JR	Junior		
MRS	Mrs.	SR	Senior		
MS	Ms.	I	The First		
DR	Doctor	II	The Second		
REV	Reverend	III	The Third		
		IV	The Fourth		
		V	The Fifth		
		MD	Medical Doctor		
		DDS	Doctor of Dental Science		

Example

The manager's name is Mr. Morgan I. Teal, Jr.

Address

Definition

The address of the person or entity involved in the incident.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the address where the person or entity involved in the incident can be contacted. The full address includes the street number, prefix, street or highway name, street type, and suffix. (For a more detailed explanation of the address components, see Section B of this module.)

Example

The manager who reported and attempted to put out the fire lives at 1001 Wilson Street.

Post Office Box (P.O. Box)

Definition

The number of a rented compartment in a post office for the storage of mail that is picked up by the business occupant.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the post office box number in the spaces provided. Leave blank if not applicable.

Apartment, Suite, or Room

Definition

The number of the specific apartment, suite, or room where the incident occurred.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the apartment, suite, or room number in the block. Leave blank if not applicable.

Example

The manager's apartment was 2–B.

City

Definition

The city where the person or entity involved in the incident lives.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the city associated with the person's or entity's address.

Example

The manager lived in Asheville.

State

Definition

The State or U.S. territory where the person or entity involved in the incident lives.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or State level.

Entry

Enter the abbreviation for the State or U.S. territory associated with the person's or entity's address.

Example

Asheville is in North Carolina and is entered as NC.

ZIP Code

Definition

A numerical code assigned by the U.S. Postal Service to all jurisdictions within the United States and U.S. Territories.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or State level.

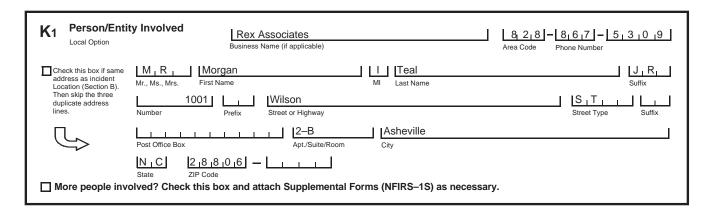
Entry

Enter the postal ZIP code for the address of the person or entity involved in the incident. Include the Plus Four digits of the ZIP code if known.

• If more than one person or entity is involved, mark the box at the bottom of K1 and fill out and attach Supplemental Forms (NFIRS–1S) as necessary.

Example

The ZIP code for the manager involved is 28806:



Owner

The type of information required for the fields in this block are the same as those in Block K1 above. The example shown in Block K1 is also applicable to the following Block K2 fields.

Business Name

Definition

The full name of the company or agency that owns the property where the incident occurred.

Purpose

This element provides a basis for long-term analysis in recognizing patterns of repeated fires in the same or different locations over a period of time. The business name is required at the local government level to establish an official document of record.

K

Entry

Enter the full name of the company or agency that owns the property where the incident occurred. If the owner is the same as the person or entity listed in Block K1, check or mark the box at the top of the K2 block and skip to Section L.

Telephone

Definition

The telephone number of the property owner involved in the incident.

Purpose

This field collects additional information on the owner of the property involved, which may be required at a later date.

Entry

Enter the area code and telephone number of the owner in the spaces provided.

Owner Name

Definition

The full name of the person who owns the property where the incident occurred. If an entity, enter the name under Business Name at the top of Block K2.

Purpose

This information provides a basis for long-term analysis in recognizing patterns of repeated incidents. The name of the owner of the property involved is required at the local government level to establish an official document of record.

Entry

Enter the full name of the person as normally written. Enter the name using the format: prefix, first name, middle initial, last name, and suffix. If the owner name is unknown, several available resources may be checked for this information, such as street directory publications, utility company records, or other public agencies. Leave blank if unknown.

Name prefixes and suffixes are listed in Block K1.

Address

Definition

The address of the owner of the property where the incident occurred.

Purpose

The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. This information is a critical part of the documentation of the incident at the local level and may be used by jurisdictions to help investigate the cause of the fire and for insurance purposes.

Entry

Enter the address where the owner of the property where the incident occurred can be contacted. The full address includes the street number, prefix, street or highway name, street type, and suffix. (For a more detailed explanation of the address components, see Section B of this module.)

Post Office Box (P.O. Box)

Definition

The number of a rented compartment in a post office for the storage of mail that is picked up by the owner.

Purpose

The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. The address is required at the local government level to establish an official document of record.

Entry

Enter the post office box number in the spaces provided. Leave blank if not applicable.

Apartment, Suite, or Room

Definition

The number of the specific apartment, suite, or room of the owner of the property involved in the incident.

Purpose

The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. The address is required at the local government level to establish an official document of record.

Entry

Enter the apartment, suite, or room number in the block. Leave blank if not applicable.

City

Definition

The city where the owner of the property involved in the incident lives, or the city that is used in the mailing address if the property is not located within city limits.

Purpose

The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. The address is required at the local government level to establish an official document of record.

Entry

Enter the city associated with the owner's address.

State

Definition

The State or U.S. territory where the owner of the property lives.

Purpose

The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the State level.

Entry

Enter the abbreviation for the State or U.S. territory associated with the owner's address. If the owner lives outside the United States or its territories, enter the code for "Other" (OO).

► A list of State/territory abbreviations is on page 3–5.

ZIP Code

Definition

A numerical code assigned by the U.S. Postal Service to all jurisdictions within the United States.

Purpose

The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the State level.

Entry

Enter the postal ZIP code associated with the owner's address. Include the Plus Four digits of the ZIP code if known.

SECTION L

Remarks

The Remarks section is an area for any comments that might be made concerning the incident. It is also a place to describe what happened, fire department operations, or unusual conditions encountered. Use this space to describe the incident in your own words. Of particular importance are observations that could aid investigators. Use additional sheets (i.e., Supplemental Form (NFIRS—1S)) as necessary. Additional sheets must have Section A at the top of each sheet completed.

This section also includes an instructional box (paper form only) intended to provide guidance to the person filling out the report. The block indicates whether a Fire Module or Structure Fire Module is required according to the Incident Type recorded in Section C of this module.

L

Fire Module Required?			
Check the box that applies and then complete the Fire Module based on Incident Type, as follows:			
☐ Buildings 111 ☐ Special structure 112 ☐ Confined 113–118 ☐ Mobile property 120–123 ☐ Vehicle 130–138 ☐ Vegetation 140–143 ☐ Outside rubbish fire 150–155	Complete Fire & Structure Modules Complete Fire Module & Section I, Structure Module Basic Module Only Complete Fire & Structure Modules Complete Fire Module Complete Fire or Wildland Module Basic Module Only		
☐ Special outside fire 160☐ Special outside fire 161–164☐ Crop fire 170–173	Complete Fire or Wildland Module Complete Fire Module Complete Fire or Wildland Module		

SECTION M

Section M requires the identification and signatures of the person completing the incident report and his/her supervisor. A completed example of the fields used is presented at the end of this section.

Authorization

Officer in Charge

Definition

The officer in charge is the ranking fire service person dealing with the incident. Position refers to the person's rank, while assignment refers to the job held at the time of the incident. The date is the day the form is signed.

Purpose

The signature and the date make the report a legal document and indicate a source for further information on the incident.

Entry

Enter the personnel or ID number as assigned by the fire department, the position, and the assignment of the officer in charge of the incident. That officer should then sign and date the report after he/she has reviewed and agreed with the information.

Example

The officer in charge was Captain John Hart.

Member Making Report

If the member making the report is the same as the officer in charge, check or mark the box by the member ID and skip the rest of Section M.

Definition

The member of the fire department who completed the report.

M

Purpose

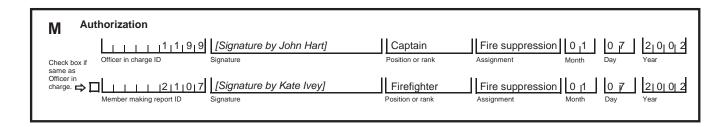
When someone other than the officer in charge completes the report, the signature of that person indicates a source for further information on the incident. In these cases, the officer in charge should review the completed report and sign it as well.

Entry

Enter the personnel or ID number as assigned by the fire department, the position, and the assignment of the member completing the report. That member should then sign and date the report after he/she has reviewed and agreed with the information.

Example

The person completing the report was Firefighter Kate Ivey:



Basic Module (NFIRS-1) **Chapter 4 Fire Module** FIRE MODULE (NFIRS-2) (NFIRS-2) **Structure Fire Module** (NFIRS-3) **Civilian Fire Casualty Module** (NFIRS-4) **Fire Service Casualty Module** (NFIRS-5) **EMS Module State NFIRS** (NFIRS-6) **Reporting Authority HazMat Module** (NFIRS-7) **U.S. Fire Administration NATIONAL FIRE DATA CENTER Wildland Fire** Module (NFIRS-8) Apparatus/ **Personnel Modules** (NFIRS-9/-10)

Arson Module (NFIRS-11)

Α	FDID State Incident Date	YYY	Station Incident Number	Exp	posure *	☐ Delete ☐ Change	NFIRS-2 Fire
B B ₁	Estimated number of residential living units in building of origin whether or not all units became involved. Buildings not invol Number of buildings involved	lved	C On-Site Materials or Products Enter up to three codes. Check one entered. On-site material (1) On-site material (2)	None comme or mat	ercial, industri erials on the p	ere any significant amount ial, energy, or agricultural property, whether or not the Charles Materia Storage Use 1	products ey became involved. als or warehousing manufacturing ds for sale ice or warehousing manufacturing ds for sale ice for sale ice
Вз	Acres burned (outside fires) Less than one acre		On-site material (3)			1 □ Bulk storage of 2 □ Processing or 3 □ Packaged goo 4 □ Repair or serv U □ Undetermined	ds for sale ice
D D ₁		<u> </u>	Cause of Ignition	Skip	tion G	Human Factor Contributing	ors ☆ to Ignition □None
D ₂	Heat source	3 F 4 A 5 C	nintentional ailure of equipment or heat ct of nature ause under investigation ause undetermined after in		2 [3 [4 [Asleep Possibly impair alcohol or drug Unattended per Possibly menta	rson ally disabled
D ₃	Item first ignited	Factor co	actors Contributing to Ignit	tion ☆ 🔲	7 Es	☐Physically disa☐Multiple person☐Age was a factostimated age of erson involved☐ Male 2	ns involved
F1 Equip Branc Mode Seria Year		F3	Equipment Power Source It Power Source Equipment Portability I Portable I Stationary I Stationa	G	up to three of a factor (1)	sion Factors	None
L	Mobile Property Involved None Not involved in ignition, but burned Involved in ignition, but did not burn Involved in ignition and burned	Mobile pro	pobile Property Type and Ma	ke L	Some of the based upon	Pre-Fire Plan Avainformation presented in the reports from other agencie. Arson report atta. Police report atta. Coroner report att. Other reports att.	his report may be is: ached ached ttached
	Structure fire? Please be sure to complete the Structure	e Fire for	m (NFIRS-3).	=		NEIDS 2 D	ovinion 01/01/05

CHAPTER 4 • FIRE MODULE (NFIRS-2)

The Fire Module (NFIRS-2) is completed for incidents involving a noncontained fire. Each section or block in the Fire Module asks for information on particular types of fires or items involved in the fire.

This module should be completed for Incident Types 100, 111, 112, 120–143, 160–173, and 170–173 found in Section C of the Basic Module. The optional Wildland Fire Module may be used instead of the Fire Module for Incident Types 140–143, 160, 170–173, 631, and 632. Users may also optionally complete the Fire Module for confined fires (Incident Types 113–118), although it is not required.

SECTION A

The guidance and directions for completing Section A of the Fire Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Fire Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

□ Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date A

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number

Entry

Enter the same exposure number found in Section A of the Basic Module.

Delete/Change

Definition

Indicates a change to information submitted on a previous Fire Module or the deletion of an incorrect report.

Purpose

To delete or correct previously reported information.

Entry

Delete: Check or mark this box when you have previously submitted data on this incident and now want to have the data on this incident deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. This will delete all data regarding the incident. Forward the report according to your normally established procedures.

Change: Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Property Details

Section B collects details about the specific property involved in the fire, whether a structure or an open piece of land.

Number of Residential Living Units

Definition

The estimated total number of residential living units in the building of origin, whether or not all of the units became involved in the fire.

This field is required when the Property Use on the Basic Module (Section J) is coded in the 400s.

Purpose

This information permits analysis of the fire problem by specific property use details. Information on the number of residential living units in the fire building provides a measure of the potential human exposure and can assist in targeting fire prevention and suppression programs.



Entry

Enter the estimated total number of residential living units in the building of origin, whether or not all the units became involved or were occupied at the time of the fire. If the fire did not occur in a residential property, check or mark the Not Residential box.

One- and two-family dwelling: Enter 1 or 2 as appropriate.

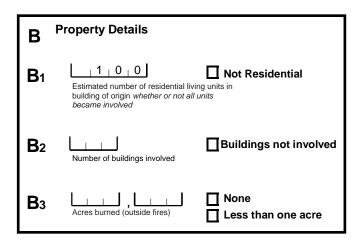
Apartment buildings, condominiums, townhouses, and rowhouses: Enter the number of separately owned or rented units in the building of origin.

Hotels and motels: Enter the number of lodging units in the building of origin.

Dormitories, rooming houses, and live-in-care centers: Enter the number of beds.

Example

For an apartment fire in a high-rise building with 100 total apartments, enter "100" for the number of residential living units:



Number of Buildings Involved

Definition

The number of buildings directly involved in the fire. Each building involved in the fire should be documented as a separate exposure.

Purpose

This element helps measure the size of the fire, which can assist with analyzing issues such as exposure protection and building density.

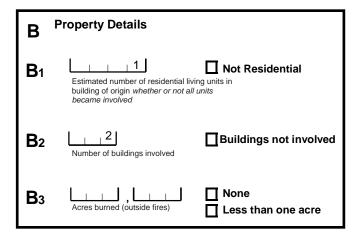
В

Entry

Enter the total number of buildings involved in the fire. If the fire was confined to the building of origin, enter a "1." If no buildings were involved, check or mark the Buildings Not Involved box.

Example

For a fire in a single-family house that extended to a neighboring house due to flame damage, enter "2" for the number of buildings involved:



■ Number of Acres Burned (outside fires)

Definition

The estimated number of acres burned in the fire incident.

Purpose

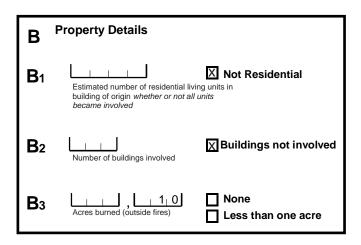
The outside fire situation can be assessed by examining the extent of the property involved. Information on the number of acres burned can assist in targeting fire prevention programs and planning fire suppression activities.

Entry

Enter the total number of acres burned in the fire. If it was not a brush/grass fire, or no acres were burned, or less than one acre burned, check or mark the appropriate box.

Example

For a fire that burned approximately 10 acres of a field, enter "10":



SECTION C

On-Site Materials or Products and On-Site Materials Storage Use

Definition

Identifies any significant amounts of commercial, industrial, energy, or agricultural products or materials on the property, whether or not they became involved in the fire.

■ If a Property Use in the 500s, 600s, 700s, or 800s was listed in Block J of the Basic Module, then this field is required. This field may also be useful for other property uses.

Purpose

This element permits analysis of the fire problem by the materials and products present on the property involved in the fire. Information on materials and products present can assist in targeting fire prevention and suppression programs and identifying training and equipment needs.

Entry

Enter the three-digit codes and descriptions for up to three of the most significant on-site materials or products, whether or not they became involved in the fire. Check or mark the Undetermined box if the on-site material is unknown. If there is no on-site material, check or mark the None box and go to Block D.

For each material or product entered, check or mark the box to the right that best describes whether the material is being stored, processed or manufactured, sold, or repaired or serviced on the property (required whenever an On-Site Material or Product entry is made).

Storage incidental to a retail or industrial operation does not have to be reported separately. Bulk storage or warehousing is generally associated with storage of large quantities of raw material awaiting transformation into a finished product or storage of finished products awaiting shipment for sale or final use.

Example

A lumberyard involved in the fire incident was coded as an outside material storage area in Section J of the Basic Module (Property Use code 807); enter "311" Lumber as the on-site material or product:

C On-Site Materials None	Complete if there were any significant amounts of commercial, industrial, energy, or agricultural products or materials on the property, whether or not they became involved			
or Products Enter up to three codes. Check one or more boxes for entered.	r each code	On-Site Materials Storage Use		
[3 ₁ 1 ₁ 1] Lumber, sawed wood On-site material (1)		1 ☑ Bulk storage or warehousing 2 ☐ Processing or manufacturing 3 ☐ Packaged goods for sale 4 ☐ Repair or service U ☐ Undetermined		
On-site material (2)	k	1 Bulk storage or warehousing 2 Processing or manufacturing 3 Packaged goods for sale 4 Repair or service U Undetermined		
On-site material (3)		1 Bulk storage or warehousing 2 Processing or manufacturing 3 Packaged goods for sale 4 Repair or service U Undetermined		

An alphabetized synonym list for the following On-Site Materials or Products codes is presented in Appendix B.

ON-SITE MATERIALS OR PRODUCTS CODES

Food, Beverages, Agriculture

Food 111 Baked goods. Meat products. Includes poultry and fish. 112 Dairy products. 113 Produce, fruit, or vegetables. 114 Sugar, spices. 115 116 Deli products. Cereals, grains; packaged. 117 118 Fat/Cooking grease. Includes lard and animal fat. Food, other. 110 Beverages 121 Alcoholic beverage. Nonalcoholic beverage. 122 120 Beverages, other. Agriculture 131 Trees, plants, flowers. 132 Feed, grain, seed. 133 Hay, straw. 134 Crop, not grain. 135 Livestock. 136 Pets.

- 137 Pesticides.
- 138 Fertilizer.
- 130 Agriculture, other.

Food, beverages, agriculture, other

Foods, beverages, agriculture, other.

Personal and Home Products

Fabrics

- 211 Curtains, drapes.
- 212 Linens.
- 213 Bedding.
- 214 Cloth, yarn, dry goods.
- 210 Fabrics, other.

Wearable products

- 221 Clothes.
- Footwear.
- 223 Eyeglasses.
- Perfumes, colognes, cosmetics.
- 226 Toiletries.
- 220 Wearable products, other.

Accessories

- 231 Jewelry, watches.
- 232 Luggage, suitcases.
- Purses, satchels, briefcases, wallets, belts, backpacks.
- 230 Accessories, other.

Furnishings

- 240 Furnishings, other.
- Furniture.
- 242 Beds, mattresses.
- 243 Clocks.
- 244 Housewares.
- Glass, ceramics, china, pottery, stoneware, earthenware.
- 246 Silverware.

Personal and home products, other

200 Personal and home products, other.

Raw Materials

Wood

- 311 Lumber, sawn wood.
- 312 Timber.
- 313 Cork.
- 314 Pulp
- 315 Sawdust, wood chips.
- 310 Wood, other.

Fibers

- 321 Cotton.
- 322 Wool.
- 323 Silk.
- 320 Fibers, other.

Animal skins

- 331 Leather.
- 332 Fur.
- 330 Animal skins, other.

Other raw materials

- 341 Ore.
- 342 Rubber.
- 343 Plastics.
- 344 Fiberglass.
- 345 Salt.
- 300 Raw materials, other

Paper Products, Rope

Paper products

- 411 Newspapers, magazines.
- 412 Books.
- 413 Greeting cards.
- 414 Paper, rolled
- 415 Cardboard.
- 416 Packaged paper products. Includes stationery.
- 417 Paper records or reports.
- 410 Paper products, other.

Rope, twine, cordage

421 Rope, twine, cordage.

Paper products, rope, other

400 Paper products, rope, other.

Flammables, Chemicals, Plastics

Flammables, combustible liquids

- 511 Gasoline, diesel fuel.
- 512 Flammable liquid. Excludes gasoline (511).
- 513 Combustible liquid. Includes heating oil. Excludes diesel fuel (511).
- 514 Motor oil.
- 515 Heavy oils, grease, noncooking related.
- 516 Asphalt.
- 517 Adhesive, resin, tar.
- 510 Flammables, combustible liquids, other.

Flammable gases

- 521 Natural gas.
- 522 LP gas, butane, propane.
- 523 Hydrogen gas.
- Flammable gases, other.

Solid fuel, coal type

- 531 Charcoal.
- 532 Coal.
- 533 Peat.
- 534 Coke.
- 530 Solid fuel, coal type, other.

Chemicals, drugs

- 541 Hazardous chemicals.
- Nonhazardous chemicals.
- 543 Cleaning supplies.
- 544 Pharmaceuticals, drugs.
- 545 Illegal drugs.
- 540 Chemicals, drugs, other.

Radioactive materials

551 Radioactive materials.

Flammables, chemicals, plastics, other

500 Flammables, chemicals, plastics, other.

Construction, Machinery, Metals

Machinery, tools

- 611 Industrial machinery.
- 612 Machine parts.
- Tools (power and hand tools).
- 610 Machinery, tools, other.

Construction supplies

- 621 Hardware products.
- 622 Construction and home improvement products. Excludes pipes and fittings (623), electrical parts and supplies (626), insulation (627), lumber (311).
- 623 Pipes, fittings.
- 624 Stone-working materials.
- 625 Lighting fixtures and lamps.
- Electrical parts, supplies, equipment. Excludes light fixtures (625).
- 627 Insulation.
- 628 Abrasives. Includes sandpaper and grinding materials.
- 629 Fencing, fence supplies.
- 620 Construction supplies, other.

Floor and wall coverings

- 631 Carpets, rugs.
- 632 Linoleum, tile.
- 633 Ceramic tile.
- 634 Wallpaper.
- 635 Paint.
- 630 Floor and wall coverings, other.

Metal products

- 641 Steel, iron products.
- Nonferrous metal products. Includes aluminum products (no combustible metals).
- 643 Combustible metal products. Includes magnesium and titanium.
- 640 Metal products, other.

Construction, machinery, metals, other

600 Construction, machinery, metals, other.

Appliances, Electronics, Medical, Laboratory

Appliances, electronics

- 711 Appliances. Includes refrigerators, stoves, irons.
- Electronic parts, supplies, equipment. Includes components such as circuit boards, radios, computers.

- 713 Electronic media. Includes diskettes, CD-ROMs, recorded music.
- Photographic equipment, supplies, materials. Includes cameras, film. Excludes digital electronic cameras (712) and electronic storage media (713).
- 710 Appliances, electronics, other.

Medical, laboratory products

- 721 Dental supplies.
- 722 Medical supplies. Includes surgical products.
- 723 Optical products.
- 724 Veterinary supplies.
- 725 Laboratory supplies.
- 720 Medical, laboratory products, other.

Appliances, electronics, medical, laboratory, other

Appliances, electronics, medical, laboratory, other.

Vehicles, Vehicle Parts

Motor vehicles and parts

- Autos, trucks, buses, recreational vehicles, riding mowers, farm vehicles.
- 812 Construction vehicles.
- 813 Motor vehicle parts. Excludes tires (814).
- 814 Tires.
- Motor vehicles and parts, other.

Watercraft

- 821 Boats, ships.
- 820 Watercraft, other.

Aircraft

- 830 Aircraft, other.
- Planes, airplanes.
- 832 Helicopters.

Rail

- Trains, light rail, rapid transit cars.
- 842 Rail equipment.
- Rail, other.

Non-motorized vehicles

- Bicycles, tricycles, unicycles. Includes tandem bicycles.
- 850 Non-motorized vehicles, other.

Other Products

Containers, packing materials

- 911 Bottles, barrels, boxes.
- 912 Packing material.
- 913 Pallets.
- 910 Containers, packing materials, other.

Previously owned products

- 921 Antiques.
- 922 Collectibles.
- 923 Used merchandise.
- 920 Previously owned products, other.

Ordnance, explosives, fireworks

- 931 Guns.
- 932 Ammunition.
- 933 Explosives
- 934 Fireworks, commercially made.
- 935 Rockets, missiles.
- 930 Ordnance, explosives, fireworks, other.

Recreation, arts products

- 941 Musical instruments.
- 942 Hobby, crafts. Excludes artwork (943).
- Art supply/artwork. Includes finished works, paint, finishing materials.
- 944 Sporting goods. Includes balls, nets, rackets, protective equipment used in sport.
- 945 Camping, hiking, outdoor products. Includes related equipment such as portable stoves, rope.
- 946 Games, toys.
- 940 Recreation, art products, other.

Mixed sales products

- 951 Office supplies.
- 952 Restaurant supplies. Excludes food (110 series).
- 950 Mixed sales products, other.

Discarded material

- 961 Junkyard materials.
- 962 Recyclable materials. Includes materials gathered specifically for the purpose of recycling.
- 960 Discarded material, other.
- 963 Trash, not recyclable.

Other On-Site Materials

- 000 On-site materials, other.
- NNN None.
- UUU Undetermined.

ON-SITE MATERIALS STORAGE USE CODES

- 1 Bulk storage or warehousing.
- 2 Processing or manufacturing.
- 3 Packaged goods for sale.
- 4 Repair or service.
- N None.
- U Undetermined.

SECTION D

Ignition

Section D is intended to collect data on several factors related to the ignition of the fire including the area of fire origin, heat source, item first ignited, and type of material first ignited.

Area of Fire Origin ☆

Definition

The primary use of the area where the fire started within the property. The area of origin may be a room, a portion of a room, a vehicle, a portion of a vehicle, or an open area devoted to a specific use. Every fire has an area of fire origin.

D

Purpose

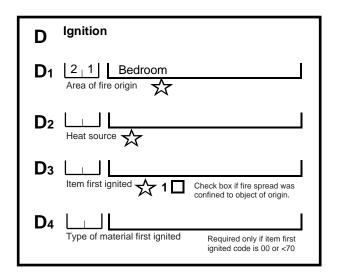
Combined with data on the fire's ignition, knowing the area where the fire originated assists in determining the cause of the fire. Such information is useful for targeting fire prevention, investigation, and suppression efforts.

Entry

Enter the two-digit code and description that best describes the area of fire origin.

For chimney fires, the area of fire origin is classified as the first area where ignition occurred. For example, if the chimney is associated with a fireplace in the family room, the code would be "14." The chimney is considered the Equipment Involved in Ignition (Section F).

Example



A fire started in a bedroom (21) of a home:

An alphabetized synonym list for the following Area of Fire Origin codes is presented in Appendix B.

AREA OF FIRE ORIGIN CODES

Means of Egress

- 01 Hallway corridor, mall.
- 02 Exterior stairway. Includes fire escapes, exterior ramps.
- 03 Interior stairway or ramp. Includes interior ramps.
- 04 Escalator: exterior, interior.
- 05 Entranceway, lobby.
- 09 Egress/exit, other.

Assembly or Sales Areas (Groups of People)

- 11 Arena, assembly area with fixed seats for 100 or more people. Includes auditoriums, chapels, places of worship, class rooms, lecture halls, arenas, theaters.
- Assembly area without fixed seats for 100 or more people. Includes ballrooms, bowling alleys, gymnasiums, multiuse areas, roller or ice skating rinks.
- Assembly area without fixed seats for less than 100 people. Includes meeting rooms, classrooms, multiuse areas.
- 14 Common room, den, family room, living room, lounge, music room, recreation room, sitting room.
- Sales area, showroom. Excludes display windows (56).
- 16 Art gallery, exhibit hall, library.
- 17 Swimming pool.
- 10 Assembly or sales areas, other.

Function Areas

- 21 Bedroom for less than five people. Includes jail or prison cells, lockups, patient rooms, sleeping areas.
- Bedroom for more than five people. Includes barracks, dormitories, patient wards.
- Dining room, cafeteria, bar area, beverage service area, canteen area, lunchroom, mess hall.
- 24 Cooking area, kitchen.
- 25 Bathroom, checkroom, lavatory, locker room, powder room, outhouse, portable toilet, sauna area.
- Laundry area, wash house (laundry).
- 27 Office.
- Personal service area. Includes barber/beauty salon area, exercise/health club, massage area.
- Function areas, other.

Technical Processing Areas

- 31 Laboratory.
- 32 Dark room, photography area, printing area.
- Treatment: first-aid area, surgery area (minor procedures).
- 34 Surgery area: major operations, operating room or theater, recovery room.
- Computer room, control room or center, data processing center, electronic equipment area, telephone booth or area, radar room.
- 36 Stage area: performance, basketball court, boxing ring, dressing room (backstage), ice rink.
- 37 Projection room, spotlight area, stage light area.
- Processing/manufacturing area, workroom, assembly area.
- 30 Technical processing areas, other.

Storage Areas

- 41 Storage room, area, tank, bin. Includes all areas where products are held awaiting process, shipment, use, sale.
- 42 Closet.
- 43 Storage: supplies or tools. Includes dead storage, maintenance supply room, tool room, basement (unfinished).
- 44 Records storage room, storage vault.
- Shipping/receiving area: loading area, dock or bay, mail room, packing area.
- Chute/container: trash, rubbish, waste. Includes compactor and garbage areas. Excludes incinerators (64).
- 47 Vehicle storage area: garage, carport.
- 40 Storage areas, other.

Service Areas

- 51 Dumbwaiter or elevator shaft.
- 52 Conduit, pipe, utility, or ventilation shaft.
- 53 Light shaft.
- 54 Chute. Includes laundry or mail chutes. Excludes trash chutes (46).
- Duct. Includes HVAC, cable, exhaust.

- 56 Display window.
- 58 Conveyor.
- 50 Service areas, other.

Service or Equipment Areas

- Machinery room or area. Includes elevator machinery room, engine room, head house, pump room, refrigeration room.
- Heating room or area, water heater area.
- 63 Switchgear area, transformer vault.
- 64 Incinerator area.
- 65 Maintenance shop or area. Includes paint shop, repair shop, welding area, workshop.
- 66 Cell, test.
- 67 Enclosure, pressurized air.
- Enclosure with enriched oxygen atmosphere.
- 60 Service or equipment areas, other.

Structural Areas

- 71 Substructure area or space, crawl space.
- 72 Exterior balcony, unenclosed porch. Excludes enclosed porches (93).
- 73 Ceiling and floor assembly, crawl space between stories.
- 74 Attic: vacant, crawl space above top story. Includes cupola, concealed roof/ceiling space, steeple.
- 75 Wall assembly, concealed wall space.
- 76 Wall surface, exterior.
- 77 Roof surface, exterior.
- 78 Awning.
- 70 Structural areas, other.

Transportation, Vehicle Areas

- Operator/passenger area of transportation equipment.
- 82 Cargo/trunk area—all vehicles.
- 83 Engine area, running gear, wheel area.
- 84 Fuel tank, fuel line.
- Separate operator/control area of transportation equipment. Includes bridges of ships, cockpit of planes.
- Excludes automobiles, trucks, buses (81).
- 86 Exterior, exposed surface.
- 80 Vehicle areas, other.

Outside Areas

- 91 Railroad right-of-way: on or near.
- 92 Highway, parking lot, street: on or near.
- 93 Courtyard, patio, terrace. Includes screened-in porches. Excludes unenclosed porches (72).
- Open area, outside. Includes farmland, fields, lawns, parks, vacant lots.
- 95 Wildland, woods.
- 96 Construction/Renovation area.
- 97 Multiple areas.
- 98 Vacant structural area.
- 90 Outside areas, other.

Other Area of Fire Origin

- 00 Area of fire origin, other.
- UU Undetermined.

▶ Heat Source ☆

► Heat Source was known as Form of Heat of Ignition in NFIRS 4.1.

Definition

The heat source that ignited the Item First Ignited (Block D3) to cause the fire.

Purpose

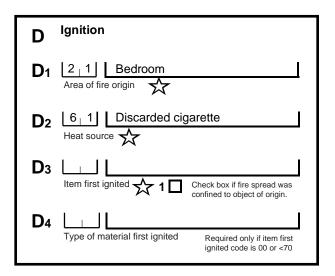
This information, combined with other factors in the ignition sequence, permits analysis of how fires start. Also, some heat sources (e.g., cigarettes, lighters) are objects whose frequency of involvement in fires is of direct interest for fire prevention efforts.

Entry

Enter the two-digit code and description that best describes the heat source that ignited the fire.

Example

A discarded cigarette (61) ignited the bed (21):



HEAT SOURCE CODES

Operating Equipment

- Spark, ember, or flame from operating equipment.
- 12 Radiated or conducted heat from operating equipment.
- 13 Electrical arcing.
- 10 Heat from operating equipment, other.

Hot or Smoldering Object

- Heat, spark from friction. Includes overheated tires.
- Molten, hot material. Includes molten metal, hot forging, hot glass, hot metal fragment, brake shoe, hot box, and slag from arc welding operations.
- 43 Hot ember or ash. Includes hot coals, coke, and charcoal; and sparks or embers from a chimney that ignite

the roof of the same structure. Excludes flying brand, embers, and sparks (83); and embers accidentally escaping from operating equipment (11).

40 Hot or smoldering object, other.

Explosives, Fireworks

- Munitions. Includes bombs, ammunition, and military rockets.
- Blasting agent, primer cord, black powder fuse. Includes fertilizing agents, ammonium nitrate, and sodium, potassium, or other chemical agents.
- 54 Fireworks. Includes sparklers, paper caps, party poppers, and firecrackers.
- 55 Model and amateur rockets.
- 56 Incendiary device. Includes Molotov cocktails and arson sets.
- 50 Explosive, fireworks, other.

Other Open Flame or Smoking Materials

- 61 Cigarette.
- 62 Pipe or cigar.
- 63 Heat from undetermined smoking material.
- 64 Match
- 65 Lighter: cigarette lighter, cigar lighter.
- 66 Candle.
- Warning or road flare; fusee.
- 68 Backfire from internal combustion engine. Excludes flames and sparks from an exhaust system (11).
- 69 Flame/torch used for lighting. Includes gas light and gas-/liquid-fueled lantern.
- Heat from open flame or smoking materials, other.

Chemical, Natural Heat Sources

- 71 Sunlight. Usually magnified through glass, bottles, etc.
- 72 Spontaneous combustion, chemical reaction.
- 73 Lightning discharge.
- 74 Other static discharge. Excludes electrical arcs (13) or sparks (11).
- 70 Chemical, natural heat sources, other.

Heat Spread From Another Fire. Excludes operating equipment.

- Heat from direct flame, convection currents spreading from another fire.
- Radiated heat from another fire. Excludes heat from exhaust systems of fuel-fired, fuel-powered equipment (12).
- Flying brand, ember, spark. Excludes embers, sparks from a chimney igniting the roof of the same structure (43).
- 84 Conducted heat from another fire.
- 80 Heat spread from another fire, other.

Other Heat Sources

- Multiple heat sources, including multiple ignitions. If one type of heat source was primarily involved, use that classification.
- 00 Heat sources, other.
- UU Undetermined.

🝱 Item First Ignited 🏠

• Item First Ignited was known as Form of Material Ignited in NFIRS 4.1.

Definition

The use or configuration of the item or material first ignited by the heat source. This block identifies the first item that had sufficient volume or heat intensity to extend to uncontrolled or self-perpetuating fire.

Purpose

This data element permits analysis of how fires start and spread. A study of this entry also helps assess the need for flammability and other materials standards. This information is helpful to manufacturers for product improvement, as well as for fire prevention efforts.

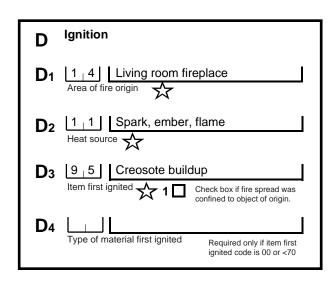
Entry

Enter the two-digit code and description that best describes the item first ignited by the heat source.

If fire spread was confined to the object of origin, check or mark the box (1) below the written entry. This is the only opportunity to enter this code—Confined to Object of Origin is not an option in Block J2 of the Structure Fire Module.

Example

Fire in a living room fireplace (14) ignited (11) creosote (95) that had built up in the chimney, causing a fire:



An alphabetized synonym list for the following Item First Ignited codes is presented in Appendix B.

ITEM FIRST IGNITED CODES

Structural Component, Finish

- 11 Exterior roof covering, surface, finish.
- 12 Exterior sidewall covering, surface, finish. Includes eaves.
- Exterior trim, appurtenances. Includes doors, porches, and platforms.
- 14 Floor covering or rug/carpet/mat, surface.
- Interior wall covering. Includes cloth wall coverings, wood paneling, and items permanently affixed to a wall or door. Excludes curtains and draperies (36) and decorations (42).
- 16 Interior ceiling covering or finish. Includes cloth permanently affixed to ceiling and acoustical tile.
- 17 Structural member or framing.
- Thermal, acoustical insulation within wall, partition or floor/ceiling space. Includes fibers, batts, boards, loose fills
- 10 Structural component or finish, other.

Furniture, Utensils. Includes built-in furniture.

- Upholstered sofa, chair, vehicle seats.
- Non-upholstered chair, bench.
- Cabinetry. Includes filing cabinets, pianos, dressers, chests of drawers, desks, tables, and bookcases. Excludes TV sets, bottle warmers, and appliance housings (25).
- 24 Ironing board.
- 25 Appliance housing or casing.
- 26 Household utensils. Includes kitchen and cleaning utensils.
- Furniture, utensils, other.

Soft Goods, Wearing Apparel

- 31 Mattress, pillow.
- 32 Bedding: blanket, sheet, comforter. Includes heating pads.
- 33 Linen, other than bedding. Includes towels and tablecloths.
- Wearing apparel not on a person.
- Wearing apparel on a person.
- 36 Curtain, blind, drapery, tapestry.
- 37 Goods not made up. Includes fabrics and yard goods.
- 38 Luggage.
- 30 Soft goods, wearing apparel, other.

Adornment, Recreational Material, Signs

- 41 Christmas tree.
- 42 Decoration.
- 43 Sign. Includes outdoor signs such as billboards.
- 44 Chips. Includes wood chips.
- 45 Toy, game.
- 46 Awning, canopy.
- 47 Tarpaulin, tent.
- 40 Adornment, recreational material, signs, other.

Storage Supplies

- Box, carton, bag, basket, barrel. Includes wastebaskets.
- Material being used to make a product. Includes raw materials used as input to a manufacturing or construction process. Excludes finished products.
- Pallet, skid (empty). Excludes palletized stock (58).
- 54 Cord, rope, twine, yarn.

- Packing, wrapping material.
- 56 Baled goods or material. Includes bale storage.
- 57 Bulk storage.
- Palletized material, material stored on pallets.
- 59 Rolled, wound material. Includes rolled paper and fabrics.
- 50 Storage supplies, other.

Liquids, Piping, Filters

- 61 Atomized, vaporized liquid. Included are aerosols.
- Flammable liquid/gas (fuel) in or escaping from combustion engines.
- Flammable liquid/gas in or escaping from final container or pipe before engine or burner. Includes piping between the engine and the burner.
- 64 Flammable liquid/gas in or escaping from container or pipe. Excludes engines, burners, and their fuel systems.
- Flammable liquid/gas, uncontained. Includes accelerants.
- 66 Pipe, duct, conduit, hose.
- Pipe, duct, conduit, or hose covering. Includes insulating materials whether for acoustical or thermal purposes, and whether inside or outside the pipe, duct, conduit, or hose.
- 68 Filter. Includes evaporative cooler pads.
- 60 Liquids, piping, filters, other.

Organic Materials

- 71 Agricultural crop. Includes fruits and vegetables.
- 72 Light vegetation (not crop). Includes grass, leaves, needles, chaff, mulch, and compost.
- 73 Heavy vegetation (not crop). Includes trees and brush.
- 74 Animal, living or dead.
- 75 Human, living or dead.
- 76 Cooking materials. Includes edible materials for man or animal. Excludes cooking utensils (26).
- Feathers or fur not on a bird or animal, but not processed into a product.
- 70 Organic materials, other.

General Materials

- Electrical wire, cable insulation. Do not classify the insulation on the wiring as the item first ignited unless there were no other materials in the immediate area, such as might be found in a cable tray or electrical vault.
- 82 Transformer. Includes transformer fluids.
- 83 Conveyor belt, drive belt, V-belt.
- 84 Tire.
- 85 Railroad ties.
- Fence, pole.
- 87 Fertilizer.
- 88 Pyrotechnics, explosives.

General Materials Continued

- 91 Book.
- 92 Magazine, newspaper, writing paper. Includes files.
- 93 Adhesive.
- 94 Dust, fiber, lint. Includes sawdust and excelsior.
- Film, residue. Includes paint, resin, and chimney film or residue and other films and residues produced as a byproduct of an operation.
- 96 Rubbish, trash, waste.
- 97 Oily rags.
- Multiple items first ignited. Use only where there are multiple fires started at approximately the same time on the same property and more than one item was initially involved.

Other Items First Ignited

00 Item first ignited, other.UU Undetermined.

Type of Material First Ignited

Type of Material First Ignited was known as Type of Material Ignited in NFIRS 4.1.

Definition

The composition of the material in the item first ignited by the heat source. The type of material ignited refers to the raw, common, or natural state of the material. The type of material ignited may be a gas, flammable liquid, chemical, plastic, wood, paper, fabric, or any number of other materials.

This field is required only if the Item First Ignited code is "00" or a code less than "70."

Purpose

This information assists in determining why fires start and spread and their severity. A study of this entry also helps assess the need for flammability and other material characteristic standards. This information is important to manufacturers for product improvement, as well as for fire prevention efforts.

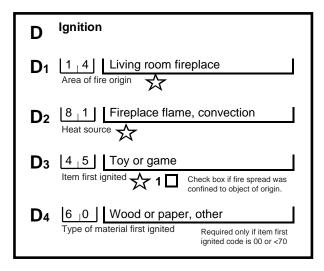
Entry

Enter the code and description that best describes the type of material first ignited by the heat source.

- Be certain to enter the first material ignited by the heat source. For example, if an arsonist poured gasoline on a wooden floor, it was the gasoline and not the wood that was the material first ignited.
- If an insulated wire short circuits, it may be the wire's insulation that was first ignited; or it may be the wood studs in the wall, thermal insulation nearby, or another material.

Example

A board game (45) made of cardboard (60) ignited (81) after being left too close to the living room fire-place (14), causing a fire:



An alphabetized synonym list for the following Type of Material First Ignited codes is presented in Appendix B.

TYPE OF MATERIAL FIRST IGNITED CODES

Flammable Gas

- 11 Natural gas. Includes methane and marsh gas.
- 12 LP gas. Includes butane, butane and air mixtures, and propane gas.
- 13 Anesthetic gas.
- 14 Acetylene gas
- 15 Hydrogen.
- Flammable gas, other. Includes benzene, benzol, carbon disulfide, carbon monoxide, ethylene, ethylene oxide, and vinyl chloride.

Flammable or Combustible Liquid

- 21 Ether, pentane-type flammable liquid. Includes all Class 1A flammable liquids.
- JP-4 jet fuel and methyl-ethyl-ketone-type flammable liquid. Includes all Class 1B flammable liquids. Excludes gasoline (23).
- 23 Gasoline.
- Turpentine, butyl-alcohol-type flammable liquid. Includes all Class IC flammable liquids.
- 25 Kerosene; Nos. 1 and 2 fuel oil; diesel-type combustible liquid. Includes all Class II combustible liquids.
- 26 Cottonseed oil; Nos. 4, 5, and 6 fuel oil; creosote-oil-type combustible liquid. Includes all Class IIIA combustible liquids.
- 27 Cooking oil, transformer oil, lubricating oil. Includes all Class IIIB combustible liquids.
- 28 Ethanol.
- Flammable or combustible liquid, other.

Volatile Solid or Chemical

- Fat, grease, butter, margarine, lard, tallow.
- 32 Petroleum jelly and nonfood grease.
- 33 Polish, paraffin, wax.
- 34 Adhesive, resin, tar, glue, asphalt, pitch, soot.
- 35 Paint, varnish—applied.
- 36 Combustible metal. Includes magnesium, titanium, and zirconium.
- Solid chemical. Includes explosives. Excludes liquid chemicals (division 2) and gaseous chemicals (division 1).
- 38 Radioactive material.
- 30 Volatile solid or chemical, other.

Plastics

Plastic, regardless of type. Excludes synthetic fibers, coated fabrics, plastic upholstery.

Natural Product

- Rubber, tire rubber. Excludes synthetic rubbers (classify as plastics (41)).
- 52 Cork.
- 53 Leather.
- 54 Hay, straw.
- Grain, natural fiber. Includes cotton, feathers, felt, barley, corn, coconut. Excludes fabrics and furniture batting (71).
- Coal, coke, briquettes, peat. Includes briquettes of carbon black and charcoal.
- 57 Food, starch. Includes flour. Excludes fat or grease (31).

- 58 Tobacco.
- Natural product, other. Includes manure.

Wood or Paper – Processed

- Wood chips, sawdust, wood shavings.
- Round timber. Includes round posts, poles, and piles.
- 63 Sawn wood. Includes all finished lumber and wood shingles.
- 64 Plywood.
- 65 Fiberboard, particleboard, and hardboard. Includes low-density pressed wood fiberboard products.
- 66 Wood pulp, wood fiber.
- Paper. Includes cellulose, waxed paper, sensitized paper, and ground-up processed paper and newsprint used as thermal insulation.
- 68 Cardboard.
- 60 Wood or paper, processed, other.

Fabric, Textiles, Fur

- 71 Fabric, fiber, cotton, blends, rayon, wool, finished goods. Includes yarn and canvas. Excludes fur and silk (74).
- Fur, silk, other fabric, finished goods. Excludes fabrics listed in Code 71.
- 75 Wig.
- 76 Human hair.
- 77 Plastic-coated fabric. Includes plastic upholstery fabric and other vinyl fabrics.
- 70 Fabric, textiles, fur, other.

Material Compounded With Oil

- 81 Linoleum.
- 82 Oilcloth.
- 86 Asphalt-treated material. Excludes by-products of combustion, soot, carbon, creosote (34).
- 80 Material compounded with oil, other.

Other Material

- 99 Multiple types of material.
- 00 Type of material first ignited, other.
- UU Undetermined.

SECTION E

This section deals with the causes and factors that contribute to a fire's ignition, which are essential pieces of information in guiding fire prevention efforts.

Cause of Ignition

Definition

The general causal factor that resulted in a heat source igniting a combustible material. The cause could be the result of a deliberate act, mechanical failure, or act of nature.

Purpose

This information is used to determine if further information about the factors related to the fire's ignition will be collected later in the module. When combined with other data elements that make up the fire's "ignition chain," it provides critical information about the nature of the events and the circumstances that caused the fire. This is an important element in understanding the causes of fires.



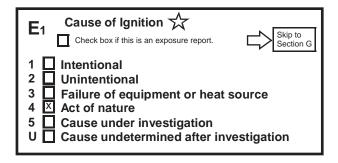
Entry

Check or mark the box best describing why the heat source and the combustible material were able to combine to initiate the fire. If this is an exposure report, check or mark the top box in this block and skip to Section G.

This is the best determination of the firefighter at the scene and may be changed later as a result of further investigation or other information.

Example

A house caught fire as a result of a lightning strike on the combustible roof (4):



CAUSE OF IGNITION CODES

- 1 Intentional. Includes deliberate misuse of heat source or a fire of an incendiary nature.
- 2 Unintentional. Includes fires caused by careless, reckless, or accidental acts.
- 3 Failure of equipment or heat source. Includes mechanical problems.
- 4 Act of nature. Includes causes related to weather, earthquakes, floods, and animals.
- 5 Cause under investigation.
- U Cause undetermined after investigation.

Factors Contributing to Ignition

Factors Contributing to Ignition was known as Ignition Factors in NFIRS 4.1.

Definition

The contributing factors that allowed the heat source and combustible material to combine to ignite the fire.

Purpose

Combined with Cause of Ignition and Human Factors Contribution to Ignition, this information explains how and why the fire started. It can also indicate whether a fire is potentially preventable through public education, code enforcement, or other strategies.

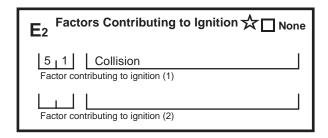
Entry

Enter the two-digit codes and descriptions for up to two contributing factors. The primary factor should be entered first. If there were no factors contributing to ignition, check or mark the None box.

Ε

Example

A vehicle caught fire immediately after colliding with a garbage truck; enter "51" Collision:



FACTORS CONTRIBUTING TO IGNITION CODES

Misuse of Material or Product

- Abandoned or discarded materials or products. Includes discarded cigarettes, cigars, tobacco embers, hot ashes, or other burning matter. Excludes outside fires left unattended.
- 12 Heat source too close to combustibles.
- Cutting, welding too close to combustibles.
- Flammable liquid or gas spilled. Excludes improper fueling technique (15) and release due to improper container (18).
- Improper fueling technique. Includes overfueling, failure to ground. Excludes fuel spills (14) and using the improper fuel (27).
- 16 Flammable liquid used to kindle fire.
- Washing part or material, painting with flammable liquid.
- Improper container or storage procedure. Includes gasoline in unimproved containers, gas containers stored at excessive temperature, and storage conditions that lead to spontaneous ignition.
- Playing with heat source. Includes playing with matches, candles, and lighters and bringing combustibles into a heat source.
- 10 Misuse of material or product, other.

Mechanical Failure, Malfunction

- 21 Automatic control failure.
- Manual control failure.
- Leak or break. Includes leaks or breaks of containers or pipes. Excludes operational deficiencies and spill mishaps.
- Worn out.
- Backfire. Excludes fires originating as a result of hot catalytic converters (41).
- 27 Improper fuel used. Includes the use of gasoline in a kerosene heater and the like.
- 20 Mechanical failure, malfunction, other.

Electrical Failure, Malfunction

- 31 Water-caused short-circuit arc.
- 32 Short-circuit arc from mechanical damage.
- 33 Short-circuit arc from defective, worn insulation.
- 34 Unspecified short-circuit arc.
- 35 Arc from faulty contact, broken conductor. Includes broken power lines and loose connections.
- Arc, spark from operating equipment, switch, or electric fence.
- 37 Fluorescent light ballast.
- 30 Electrical failure, malfunction, other.

Design, Manufacturing, Installation Deficiency

- 41 Design deficiency.
- 42 Construction deficiency.
- 43 Installation deficiency.
- 44 Manufacturing deficiency.
- Design, manufacturing, installation deficiency, other.

Operational Deficiency

- 51 Collision, knock down, run over, turn over. Includes automobiles and other vehicles.
- 52 Accidentally turned on, not turned off.
- 53 Equipment unattended.
- 54 Equipment overloaded.
- Failure to clean. Includes lint and grease buildups in chimneys, stove pipes.
- 56 Improper startup/shutdown procedure.
- 57 Equipment not used for purpose intended. Excludes overloaded equipment (54).
- 58 Equipment not operated properly.
- 50 Operational deficiency, other.

Natural Condition

- High wind.
- 62 Storm.
- 63 High water, including floods.
- 64 Earthquake.
- 65 Volcanic action.
- 66 Animal.
- 60 Natural condition, other.

Fire Spread or Control

- 71 Exposure fire.
- 72 Rekindle.
- Outside/Open fire for debris or waste disposal.
- 74 Outside/Open fire for warming or cooking.
- 75 Agriculture or land management burns. Includes prescribed burns.
- 70 Fire spread or control, other.

Other Factors Contributing to Ignition

- 00 Factors contributing to ignition, other.
- NN None.
- UU Undetermined.

Human Factors Contributing to Ignition

Definition

The human condition or situation that allowed the heat source and combustible material to combine to ignite the fire.

Purpose

Combined with Cause of Ignition and Factors Contributing to Ignition, this element explains how and why the fire started. It can also indicate whether a fire is potentially preventable through public education, code enforcement, or other strategies.

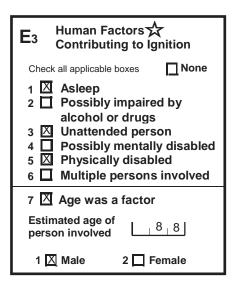
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Entry

Check or mark all applicable boxes. If age was a factor, enter the estimated age of the person involved in the space provided. If known, the gender of the person involved should also be checked or marked. If there were no known human factors contributing to ignition, check or mark the None box.

Example

An elderly man (1) of 88 years who was physically disabled (5) and home alone (3) fell asleep (1) in his chair while smoking. The dropped cigarette contacted combustible materials next to his chair. The respondent determined that even had the occupant awakened, he would have been unable to extinguish the fire due to his age (7):



HUMAN FACTORS CONTRIBUTING TO IGNITION CODES

- 1 Asleep. Includes fires that result from a person falling asleep while smoking.
- Possibly impaired by alcohol or drugs. Includes people who fall asleep or act recklessly or carelessly as a result of drugs or alcohol. Excludes people who simply fall asleep (1).
- Unattended or unsupervised person. Includes "latch key" situations whether the person involved is young or old and situations where the person involved lacked supervision or care.
- 4 Possibly mentally disabled. Excludes impairments of a temporary nature such as those caused by drugs or alcohol (2).
- 5 Physically disabled.
- 6 Multiple persons involved. Includes gang activity.
- 7 Age was a factor.
- N None.

AGE FACTOR GENDER CODES

- 1 Male.
- Female.

SECTION F

This section identifies the equipment where the heat of ignition originated, the power source that actually operated the equipment, and whether the equipment is normally stationary or is designed to move from location to location.

The three blocks in this section—Equipment Involved in Ignition, Equipment Power Source, and Equipment Portability—were collectively known as Equipment Involved in Ignition in NFIRS 4.1.

Equipment Involved in Ignition

Equipment Type

Definition

The piece of equipment that provided the principal heat source to cause ignition.

Purpose

Analysis of the equipment involved in ignition is useful for improving product safety and preventive maintenance. It is just as important to know the kind of equipment that was used improperly as it is to know the kind of equipment that malfunctioned. Misuse can be the direct result of the way the equipment is designed and constructed. When involved in ignition, equipment information provides an important part of the causal data. Equipment involved in ignition can be compared to other causal data to determine if the equipment was (or was not) operating properly.

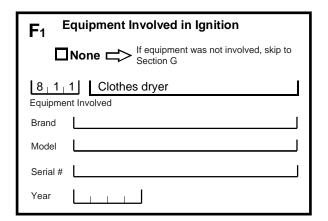
Entry

Enter the three-digit code and description that best describes the equipment involved in ignition. If no equipment was involved, check or mark the None box and skip to Section G.

• If a vehicle was involved in ignition, use Section H.

Example

A fire started by a short circuit in a dryer (811):



F

An alphabetized synonym list for the following Equipment Involved in Ignition codes is presented in Appendix B.

EQUIPMENT INVOLVED IN IGNITION CODES

Heating, Ventilation, and Air Conditioning

- 111 Air conditioner.
- Heat pump.
- 113 Fan
- Humidifier, non-heat producing. Excludes heaters with built-in humidifiers (131, 132).
- 115 Ionizer.
- Dehumidifier, portable.
- 117 Evaporative cooler, cooling tower.
- 121 Fireplace, masonry.
- Fireplace, factory-built.
- Fireplace, insert/stove.
- 124 Stove, heating.
- 125 Chimney connector, vent connector.
- 126 Chimney: brick, stone, masonry.
- 127 Chimney: metal. Includes stovepipes and flues.
- 120 Fireplace, chimney, other.
- Furnace, local heating unit, built-in. Includes built-in humidifiers. Excludes process furnaces, kilns (353).
- Furnace, central heating unit. Includes built-in humidifiers. Excludes process furnaces, kilns. (353)
- Boiler (power, process, heating).
- Heater. Includes floor furnaces, wall heaters, and baseboard heaters. Excludes catalytic heaters (142), oil-filled heaters (143), hot water heaters (152).
- 142 Heater, catalytic.
- Heater, oil-filled. Excludes kerosene heaters (141).
- 144 Heat lamp.
- 145 Heat tape.
- Water heater. Includes sink-mounted instant hot water heaters and waterbed heaters.
- 152 Steam line, heat pipe, hot air duct. Includes radiators and hot water baseboard heaters.
- Heating, ventilation, and air conditioning, other.

Electrical Distribution, Lighting, and Power Transfer

- 211 Electrical power (utility) line. Excludes wires from the utility pole to the structure.
- 212 Electrical service supply wires; wires from utility pole to meter box.
- 213 Electric meter, meter box.
- 214 Electrical wiring from meter box to circuit breaker board, fuse box, or panel board.
- 215 Panel board (fuse); switchboard, circuit breaker board with or without ground-fault interrupter
- 216 Electrical branch circuit. Includes armored (metallic) cable, nonmetallic sheathing, or wire in conduit.
- Outlet, receptacle. Includes wall-type receptacles, electric dryer and stove receptacles.
- 218 Wall-type switch. Includes light switches.
- Ground-fault interrupter (GFI), portable, plug-in.
- 210 Electrical wiring, other.
- Transformer, distribution-type.
- Overcurrent, disconnect equipment. Excludes panel boards.
- Transformer, low-voltage (not more than 50 volts).
- 224 Generator.
- 225 Inverter.
- Uninterrupted power supply (UPS).



227	Surge protector.
228	Battery charger, rectifier.
229	Battery. Includes all battery types.
231	Lamp: tabletop, floor, desk. Excludes halogen fixtures (235) and light bulbs (238).
232	Lantern, flashlight.
233	Incandescent lighting fixture.
234	Fluorescent lighting fixture, ballast.
235	Halogen lighting fixture or lamp.
236	Sodium, mercury vapor lighting fixture or lamp.
237	Portable or movable work light, trouble light.
238	Light bulb.
230	Lamp, lighting, other.
241	Night light.
242	Decorative lights, line voltage. Includes holiday lighting, Christmas lights.
243	Decorative or landscape lighting, low voltage.
244	Sign. Includes neon signs.
251	Fence, electric.
252	Traffic control device
253	Lightning rod, arrester/grounding device.
261	Power cord, plug; detachable from appliance.
262	Power cord, plug; permanently attached to appliance.
263	Extension cord.
260	Cord, plug, other.
200	Electrical distribution, lighting, and power transfer, other.

Shon Tools and Industrial Equipment

энор то	ois and industrial Equipment
311	Power saw.
312	Power lathe.
313	Power shaper, router, jointer, planer.
314	Power cutting tool.
315	Power drill, screwdriver.
316	Power sander, grinder, buffer, polisher.
317	Power hammer, jackhammer.
318	Power nail gun, stud driver, stapler.
310	Power tools, other.
321	Paint dipper.
322	Paint flow coating machine.
323	Paint mixing machine.
324	Paint sprayer.
325	Coating machine. Includes asphalt-saturating and rubber-spreading machines.
320	Painting tools, other.
331	Welding torch. Excludes cutting torches (332).
332	Cutting torch. Excludes welding torches (331).
333	Burners. Includes Bunsen burners, plumber furnaces, and blowtorches. Excludes weed burners (523)
334	Soldering equipment.
341	Air compressor.
342	Gas compressor.
343	Atomizing equipment. Excludes paint spraying equipment (324).
344	Pump. Excludes pumps integrated with other types of equipment.
345	Wet/Dry vacuum (shop vacuum).
346	Hoist, lift, crane.
347	Powered jacking equipment. Includes hydraulic rescue tools.
348	Drilling machinery or equipment. Includes water or gas drilling equipment.

Hydraulic equipment, other.

340

351	Heat-treating equipment.
352	Incinerator.
353	Industrial furnace, oven, kiln. Excludes ovens for cooking (646).
354	Tarpot, tar kettle.
355	Casting, molding, forging equipment.
356	Distilling equipment.
357	Digester, reactor.
358	Extractor, waste recovery machine. Includes solvent extractors such as used in dry-cleaning operations and garnetting equipment.
361	Conveyor. Excludes agricultural conveyors (513).
362	Power transfer equipment: ropes, cables, blocks, belts.
363	Power takeoff.
364	Powered valves.
365	Bearing or brake.
371	Picking, carding, weaving machine. Includes cotton gins.
372	Testing equipment.
373	Gas regulator. Includes propane, butane, LP, or natural gas regulators and flexible hose connectors to gas appliances.
374	Motor, separate. Includes bench motors. Excludes internal combustion motors (375).
375	Internal combustion engine (nonvehicular).
376	Printing press.
377	Car washing equipment.
300	Shop tools and industrial equipment, other.

Commercial and Medical Equipment

- Dental, medical, or other powered bed or chair. Includes powered wheelchairs.
- 412 Dental equipment, other.
- 413 Dialysis equipment.
- 414 Medical imaging equipment. Includes MRI, CAT scan, and ultrasound.
- 415 Medical monitoring equipment.
- 416 Oxygen administration equipment.
- 417 Radiological equipment, x-ray, radiation therapy.
- 418 Sterilizer, medical.
- Therapeutic equipment.
- 410 Medical equipment, other.
- 421 Transmitter.
- Telephone switching gear, including PBX.
- TV monitor array. Includes control panels with multiple TV monitors and security monitoring stations. Excludes single TV monitor configurations (753).
- Studio-type TV camera. Includes professional studio television cameras. Excludes home camcorders and video equipment (756).
- Studio-type sound recording/modulating equipment.
- 426 Radar equipment.
- 431 Amusement ride equipment.
- 432 Ski lift.
- 433 Elevator or lift.
- 434 Escalator.
- 441 Microfilm, microfiche viewing equipment.
- Photo processing equipment. Includes microfilm processing equipment.
- 443 Vending machine.
- Nonvideo arcade game. Includes pinball machines and the like. Excludes electronic video games (755).
- 445 Water fountain, water cooler.
- 446 Telescope. Includes radio telescopes.
- 451 Electron microscope.



450 Laboratory 6	equipment,	other.
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400 Commercial and medical equipment, other.

Garden Tools and Agricultural Equipment

- Combine, threshing machine.
 Hay processing equipment.
- 513 Farm elevator or conveyor.
- 514 Silo loader, unloader, screw/sweep auger.
- 515 Feed grinder, mixer, blender.
- 516 Milking machine.
- 517 Pasteurizer. Includes milk pasteurizers.
- 518 Cream separator.
- 521 Sprayer, farm or garden.
- 522 Chain saw.
- 523 Weed burner.
- 524 Lawn mower.
- 525 Lawn, landscape trimmer, edger.
- Lawn vacuum.
- 532 Leaf blower.
- 533 Mulcher, grinder, chipper. Includes leaf mulchers.
- 534 Snow blower, thrower.
- 535 Log splitter.
- 536 Post hole auger.
- 537 Post driver, pile driver.
- 538 Tiller, cultivator.
- Garden tools and agricultural equipment, other.

Kitchen and Cooking Equipment

- Blender, juicer, food processor, mixer.
- 612 Coffee grinder.
- 621 Can opener.
- 622 Knife.
- Knife sharpener.
- 631 Coffee maker or teapot.
- Food warmer, hot plate.
- Kettle.
- 634 Popcorn popper.
- 635 Pressure cooker or canner.
- 636 Slow cooker.
- 637 Toaster, toaster oven, countertop broiler.
- 638 Waffle iron, griddle.
- Wok, frying pan, skillet.
- Bread-making machine.
- Deep fryer.
- 643 Grill, hibachi, barbecue.
- Microwave oven.
- 645 Oven, rotisserie.
- Range or kitchen stove with or without oven or cooking surface. Includes counter-mounted stoves.
- 647 Steam table, warming drawer/table.
- Dishwasher.
- Freezer when separate from refrigerator.
- 653 Garbage disposer.
- Grease hood/duct exhaust fan.

655	Ice maker (separate from refrigerator).
656	Refrigerator, refrigerator/freezer.
600	Kitchen and cooking equipment, other.
Flectron	nic and Other Electrical Equipment
711	Computer. Includes devices such as hard drives and modems installed inside the computer casing. Excludes
/ 1 1	external storage devices (712).
712	Computer storage device, external. Includes CD-ROM devices, tape drives, and disk drives. Excludes such
712	devices when they are installed within a computer (711).
713	Computer modem, external. Includes digital, ISDN modems, cable modems, and modem racks. Excludes
, 10	modems installed within a computer (711).
714	Computer monitor. Includes LCD or flat-screen monitors.
715	Computer printer. Includes multifunctional devices such as copier, fax, and scanner.
716	Computer projection device, LCD panel, projector.
710	Computer device, other.
721	Adding machine, calculator.
722	Telephone or answering machine.
723	Cash register.
724	Copier. Includes large standalone copiers. Excludes small copiers and multifunctional devices (715).
725	Fax machine.
726	Paper shredder.
727	Postage, shipping meter equipment.
728	Typewriter.
720	Office equipment, other.
731	Guitar.
732	Piano, organ. Includes player pianos. Excludes synthesizers and musical keyboards (733).
733	Musical synthesizer or keyboard. Excludes pianos, organs (732).
730	Musical instrument, other.
741	CD player (audio). Excludes computer CD, DVD players (712).
742	Laser disk player. Includes DVD players and recorders.
743	Radio. Excludes two-way radios (744).
744	Radio, two-way.
745	Record player, phonograph, turntable.
747	Speakers, audio; separate components.
748	Stereo equipment. Includes receivers, amplifiers, equalizers. Excludes speakers (747).
749	Tape recorder or player.
740	Sound recording or receiving equipment, other.
751	Cable converter box.
752	Projector: film, slide, overhead.
753	Television.
754	VCR or VCR-TV combination.
755	Video game, electronic.
756	Camcorder, video camera.
757	Photographic camera and equipment. Includes digital cameras.
750	Video equipment, other.
700	Electronic equipment, other.
700	Electronic equipment, other.

Personal and Household Equipment

811	Clothes dryer.
812	Trash compactor.
813	Washer/Dryer combination (within one frame).
814	Washing machine, clothes.
821	Hot tub, whirlpool, spa.
822	Swimming pool equipment.
830	Floor care equipment, other.



831	Broom, electric.
832	Carpet cleaning equipment. Includes rug shampooers.
833	Floor buffer, waxer, cleaner.
834	Vacuum cleaner.
841	Comb, hair brush.
842	Curling iron.
843	Electrolysis equipment.
844	Hair curler warmer.
845	Hair dryer.
846	Makeup mirror, lighted.
847	Razor, shaver (electric).
848	Suntan equipment, sunlamp.
849	Toothbrush (electric).
850	Portable appliance designed to produce heat, other.
851	Baby bottle warmer.
852	Blanket, electric.
853	Heating pad.
854	Clothes steamer.
855	Clothes iron.
861	Automatic door opener. Excludes garage door openers (863).
862	Burglar alarm.
863	Garage door opener.
864	Gas detector.
865	Intercom.
866	Smoke or heat detector, fire alarm. Includes control equipment.
868	Thermostat.
871	Ashtray.
872	Charcoal lighter, utility lighter.
873	Cigarette lighter, pipe lighter.
874	Fire-extinguishing equipment. Includes electronic controls.
875	Insect trap. Includes bug zappers.
876	Timer.
877	Novelty Lighter.
881	Model vehicles. Includes model airplanes, boats, rockets, and powered vehicles used for hobby and recreational purposes.
882	Toy, powered.
883	Woodburning kit.
891	Clock.
892	Gun.
893	Jewelry-cleaning machine.
894	Scissors.
895	Sewing machine.
896	Shoe polisher.
897	Sterilizer, non-medical.
800	Personal and household equipment, other.
000	1 crooting and nousciroid equipment, outer.

Other Equipment Involved in Ignition

Equipment involved in ignition, other.

NNN None.

UUU Undetermined

F

Equipment Brand, Model, Serial Number, and Year

Definition

The information in this block precisely identifies the equipment that was involved in ignition. As possible, the following information should be recorded:

Brand: The name by which the equipment is most commonly known.

Model: The model name or number assigned to the equipment by the manufacturer. If there is no specific model name or number, use the common physical description of the equipment.

Serial Number: The manufacturer's serial number that is generally stamped on an identification plate on the equipment.

Year: The year that the equipment was built.

Purpose

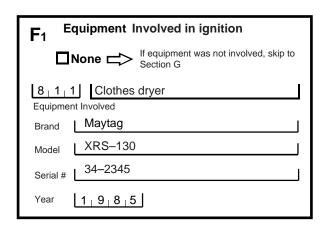
Provides detailed information identifying specific types of equipment that failed or contributed to the fire. This information can be used to determine whether particular brands or models cause problems more frequently than others; and to identify equipment for product recalls or in the development of new product safety codes.

Entry

Enter the brand, model, serial number, and year of the equipment involved in ignition. If no equipment was involved in ignition, check or mark the None box and go to Section G.

Example

The clothes dryer was a 1985 Maytag Model XRS-130, serial number 34-2345:



Equipment Power Source

Definition

The type of power used by the equipment involved in ignition of the fire. This does not include what actually produces the power.



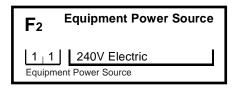
Purpose

Combined with other factors in the ignition sequence, this element helps identify fire causes for analysis. Power source data are useful for determining compliance with standards, analyzing the effectiveness of codes and regulations, and targeting prevention programs.

Entry

Enter the two-digit code and description that best describes the power source of the equipment involved in ignition.

Example



Enter electrical line voltage (11) to describe the power source of an electric range:

EQUIPMENT POWER SOURCE CODES

Electrical

- 11 Electrical line voltage (50 volts or greater). Includes typical house current.
- Batteries and low voltage (less than 50 volts).
- 10 Electrical, other.

Gas Fuels

- Natural gas or other lighter-than-air gas. Includes hydrogen.
- LP gas or other heavier-than-air gas. Includes propane and butane gas.
- 20 Gas fuels, other.

Liquid Fuels

- 31 Gasoline.
- 32 Alcohol.
- 33 Kerosene, diesel fuel, No. 1 and 2 fuel oil. Includes industrial furnace oils and bunker oils.
- 34 No. 4, 5, and 6 fuel oils.
- 30 Liquid fuels, other.

Solid Fuels

- 41 Wood, paper.
- 42 Coal, charcoal.
- 43 Chemicals.
- 40 Solid fuels, other.

Other Power Sources

- 51 Compressed air.
- 52 Steam.
- 53 Water.
- 54 Wind.
- 55 Solar.
- 56 Geothermal.
- 57 Nuclear.
- 58 Fluid/Hydraulic power source.
- 00 Power source, other.
- UU Undetermined.

Equipment Portability

Definition

Describes the equipment involved in ignition as either portable or stationary.

Purpose

This information is useful for better defining the type of equipment involved in ignition, improving product safety, and highlighting possible preventive maintenance.

Entry

Check or mark the box best indicating the portability of the equipment involved in ignition of the fire.

Portable equipment normally can be moved by one or two persons, is designed to be used in multiple locations, and requires no tools to install.

Example

A fire involves a tripod-mounted halogen quartz light used at a construction site:

EQUIPMENT PORTABILITY CODES

- Portable. Includes equipment that can be carried or moved by one or two persons and designed to be used in a variety of locations. Tools are not needed to install or operate the equipment.
- 2 Stationary. Includes equipment that is mounted at a fixed site or location or designed to be operated in one location.

SECTION G

The data elements in this section help provide a uniform way to identify factors contributing to the growth and spread of the fire. This is useful to report incident information that has not been captured by other data elements and that may have a bearing on the incident.

Fire Suppression Factors

Definition

Factors that contributed to the growth, spread, or suppression of the fire. This is used to report incident information that directly impacted the ignition, spread of fire or smoke, incident complexity, or presence of hazardous conditions.

Purpose

Fire suppression factors provide essential guides for planning strategic and tactical procedures for future incidents, as well as for identifying fire training and equipment needs.

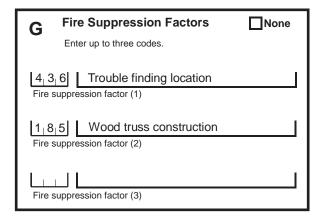
Entry

Enter the three-digit code and description for up to three fire suppression factors or conditions that constituted a significant fire suppression problem or affected how the fire was managed. If no conditions or factors affected fire suppression efforts, check or mark the None box.

Example

The first-due engine company was delayed due to "trouble finding location" (436) after incorrect information was given by the dispatcher.

Due to the instability of the "wood truss construction" (185) roof, firefighters halted their interior attack and went into a defensive fire suppression mode:



FIRE SUPPRESSION FACTORS CODES

Building Construction or Design

- 112 Roof collapse.
- 113 Roof assembly combustible.
- 115 Solar panels.
- 121 Ceiling collapse.
- Holes or openings in walls or ceilings.
- 131 Wall collapse.
- 132 Difficult to ventilate.
- 134 Combustible interior finish.
- 137 Balloon construction.
- 138 Internal arrangement of partitions.
- 139 Internal arrangement of stock or contents.
- 141 Floor collapse.
- 151 Lack of fire barrier walls or doors.
- 153 Transoms.
- 161 Attic undivided.
- 166 Insulation combustible.
- 173 Stairwell not enclosed.
- 174 Elevator shaft.
- 175 Dumbwaiter.
- 176 Duct, vertical.
- 177 Chute: rubbish, garbage, laundry.
- 181 Supports unprotected.
- 182 Composite plywood I-beam construction.
- 183 Composite roof/floor sheathing construction.
- 185 Wood truss construction.
- 186 Metal truss construction.
- Fixed burglar protection assemblies (bars, grills on windows or doors).
- 188 Quick release failure of bars on windows or doors.
- 192 Previously damaged by fire.
- Building construction or design, other.

Act or Omission

- Doors left open or outside door unsecured.
- Fire doors blocked or did not close properly.
- Violation of applicable or locally adopted fire, building, or life safety code.
- 222 Illegal and clandestine drug operation.
- 232 Intoxication, drugs or alcohol.
- 253 Riot or civil disturbance. Includes hostile acts.
- 254 Person(s) interfered with operations.
- Accelerant used.
- Act or omission, other.

On-Site Materials

- 311 Aisles blocked or improper width.
- 312 Significant and unusual fuel load from structure components.
- 313 Significant and unusual fuel load from contents of structure.
- 314 Significant and unusual fuel load outside from natural environment conditions.
- 315 Significant and unusual fuel load from man-made condition.
- 316 Storage, improper.
- 321 Radiological hazard onsite.

322	Biological hazard onsite.
323	Cryogenic hazard onsite.
324	Hazardous chemical, corrosive material, or oxidizer.
325	Flammable/Combustible liquid hazard.
327	Explosives hazard present.
331	Decorations. Includes crepe paper, garland.
341	Natural or other lighter-than-air gas present.
342	Liquefied petroleum (LPG) or other heavier-than-air s

- (LPG) or other heavier-than-air gas present.
- 361 Combustible storage >12 feet to top of storage. Excludes rack storage (362).
- 362 High rack storage.
- 300 On-site materials, other.

Delays

- 411 Delayed detection of fire.
- 412 Delayed reporting of fire. Includes occupants investigating the source of the alarm or smoke before calling the fire department.
- 413 Alarm system malfunction.
- Alarm system shut off for valid reason. Includes systems being maintained or repaired. 414
- Alarm system inappropriately shut off. 415
- 421 Unable to contact fire department. Includes use of wrong phone number and cellular mobile phone problems.
- 424 Information incomplete or incorrect.
- 42.5 Communications problem; system failure of local, public, or other telephone network.
- 431 Blocked or obstructed roadway. Includes blockages due to construction or illegal parking.
- 434 Poor or no access for fire department apparatus.
- 435 Traffic delay.
- Trouble finding location. 436
- Size, height, or other building characteristic delayed access to fire. 437
- 438 Power lines down/arcing.
- 443 Poor access for firefighters.
- 444 Secured area.
- 445 Guard dogs.
- Aggressive animals. Excludes guard dogs (445). 446
- 447 Suppression delayed due to evaluation of hazardous or unknown materials at incident scene.
- Locked or jammed doors. 448
- 451 Apparatus failure before arrival at incident.
- 452 Hydrants inoperative.
- Airspace restriction. 461
- 462 Military activity.
- 481 Closest apparatus unavailable.
- 400 Delays, other.

Protective Equipment

- 510 Automatic fire suppression system problem. Includes system failures, shutoffs, inadequate protection to cover hazard, and the like.
- 520 Automatic sprinkler or standpipe/fire department connection problem. Includes damage, blockage, failure, improper installation.
- 531 Water supply inadequate: private.
- 532 Water supply inadequate: public.
- 543 Electrical power outage.
- Failure of rated fire protection assembly. Includes fire doors, fire walls, floor/ceiling assemblies, and the like. 561
- 562 Protective equipment negated illegally or irresponsibly. Includes fire doors, dampers, sprinklers, and the like.
- 500 Protective equipment, other.

Egress/Exit Problems

- Occupancy load above legal limit.
- Evacuation activity impeded fire department access.
- Window type impeded egress. Includes windows too small.
- Windowless wall.
- Young occupants.
- 622 Elderly occupants
- Physically disabled occupants.
- 624 Mentally disabled occupants.
- Physically restrained/confined occupants.
- 626 Medically disabled occupants.
- 641 Special event.
- 642 Public gathering.
- 600 Egress/exit problems, other.

Natural Conditions

- 711 Drought or low fuel moisture.
- 712 Humidity, low.
- 713 Humidity, high.
- 714 Temperature, low.
- 715 Temperature, high.
- 721 Fog.
- 722 Flooding.
- 723 Ice.
- 724 Rain.
- 725 Snow.
- 732 Wind. Includes hurricanes and tornados.
- 741 Earthquake.
- 760 Unusual vegetation fuel loading.
- 771 Threatened or endangered species.
- 772 Timber sale activity.
- 773 Fire restriction.
- Historic disturbance (past fire history can dictate fire behavior).
- 775 Urban-wildland interface area.
- 700 Natural conditions, other.

Other Fire Suppression Factors

000 Fire suppression factors, other.

NNN None.

SECTION H

Mobile property is property that is designed to be movable in relation to fixed property whether or not it still is. Mobile property is always located on a specific property and, when mobile property is involved, the Property Use (Basic Module, Section J) should always be completed.

Mobile Property Involved

Definition

This element is used to determine how mobile property relates to a fire (i.e., if involved in the ignition and whether or not it burned).

Purpose

The role that mobile property played in the incident can reveal problems and lead to appropriate corrective actions.

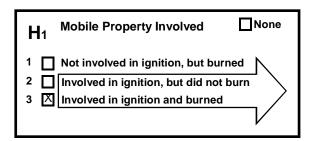
Entry

Check or mark the box best describing the role that mobile property had in the fire. If no mobile property was involved in ignition, check or mark the None box.

■ If "1" is checked or marked, it is not necessary to complete Block H2. If "2" or "3" is checked or marked, proceed to Block H2.

Example

A fire started under the hood of an automobile (3):



MOBILE PROPERTY INVOLVED CODES

- 1 Mobile property not involved in ignition, but burned in fire following ignition.
- 2 Mobile property was involved in ignition, but did not burn. Includes fires started by exhaust systems of automobiles and sparks thrown off by trains.
- 3 Mobile property involved in ignition, and it burned.
- N None.

Mobile Property: Type, Make, Model, Year, License Number, State, VIN

Definition

The information in this block precisely identifies the mobile property involved in a fire's ignition. As possible, the following information should be recorded:

Type: Property that is designed and constructed to be mobile, movable under its own power, or towed, such as an airplane, automobile, boat, cargo trailer, farm vehicle, motorcycle, or recreational vehicle.

Make: The name of the manufacturer of the mobile property.

Model: The manufacturer's model name. If one does not exist, use the physical description of the property that is commonly used to describe it, such as "three-bedroom" (mobile home) or "four-door" (sedan).

Year: The year the mobile property was manufactured.

License Plate Number (if any): The number on the license plates affixed to the vehicle; plates are generally issued by a State agency of motor vehicles. License numbers may also be available for boats, airplanes, and farm vehicles.

State: The State in which the vehicle is licensed.

■ If a commercial vehicle that is involved in the incident is licensed in multiple States, record the State license where the incident occurred. If no license exists for the incident's State, use the State license of the vehicle's home origin.

VIN: The manufacturer's Vehicle Identification Number that is generally stamped on an identification plate on the mobile property.

Purpose

This element provides detailed information that identify the specific types of mobile property involved in an incident, which can be used to determine whether particular brands or models are more often a problem than others. Data on make, model, year, and other information are useful for determining compliance to standards of mobile properties and analyzing the effectiveness of these codes, standards, and regulations. The data also can be used to identify special hazards.

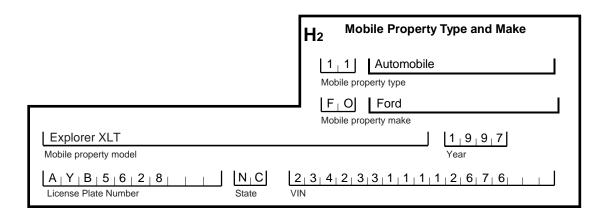
Entry

Enter the two-digit code and description of the property type. Enter the two-character code (from the list at the end of this chapter) and description of the property make. Enter the remaining information in Block H2 as appropriate. Be as specific as possible in making these entries.

Both the License Plate Number and VIN are left-justified in their fields.

Example

A 1997 Ford XLT (11), licensed in North Carolina (AYB5628), ignited when it hit a telephone pole. The vehicle identification number was 234–233–1111–2676:



MOBILE PROPERTY TYPE CODES

Passenger Road Vehicles

- 11 Automobile, passenger car, ambulance, limousine, race car, taxicab.
- Bus, school bus. Includes "trackless" trolley buses.
- Off-road recreational vehicle. Includes dune buggies, golf carts, go-carts, snowmobiles. Excludes sport utility vehicles (11) and motorcycles (18).
- Motor home (has own engine), camper mounted on pickup, bookmobile.
- Trailer, travel; designed to be towed.
- 16 Trailer, camping; collapsible, designed to be towed.
- Mobile home, bank, classroom, or office (all designed to be towed), whether mounted on a chassis or on blocks for semipermanent use.
- 18 Motorcycle, trail bike. Includes motor scooters and mopeds.
- 10 Passenger road vehicles, other.

Freight Road Transport Vehicles

- General use truck, dump truck, fire apparatus.
- Pickup truck, hauling rig (non-motorized).
- Trailer, semi; designed for freight (with or without tractor).
- Tank truck, nonflammable cargo. Includes milk and water tankers, liquid nitrogen tankers.
- 25 Tank truck, flammable or combustible liquid, chemical cargo.
- 26 Tank truck, compressed gas or LP gas.
- Garbage, waste, refuse truck. Includes recyclable material collection trucks. Excludes roll-on-type trash containers (73).
- 20 Freight road transport vehicles, other.

Rail Transport Vehicles

- 31 Diner car, passenger car.
- 32 Box, freight, or hopper car.
- 33 Tank car.
- Container or piggyback car (see 73 for container).
- 35 Engine/locomotive.
- Rapid transit car, trolley (self-powered for use on track). Includes self-powered rail passenger vehicles.
- 37 Maintenance equipment car. Includes cabooses and cranes.
- 30 Rail transport vehicles, other.

Water Vessels

- 41 Boat less than 65 ft (20 m) in length overall. Excludes commercial fishing vessels (48).
- Boat or ship equal to or greater than 65 ft (20 m) in length but less than 1,000 tons.
- 43 Cruise liner or passenger ship equal to or greater than 1,000 tons.
- 44 Tank ship.
- 45 Personal water craft. Includes one- or two-person recreational water craft.
- Cargo or military ship equal to or greater than 1,000 tons. Includes vessels not classified in 44 and 47.
- Non-self-propelled vessel. Includes all vessels without their own motive power, such as towed petroleum balloons, barges, and other towed or towable vessels. Excludes sailboats (49).
- Commercial fishing or processing vessel. Includes shell fishing vessels.
- 49 Sailboats. Includes those with auxiliary power.
- 40 Water vessels, other.

Aircraft

- Personal, business, utility aircraft less than 12,500 lb (5,670 kg) gross weight. Includes gliders.
- Personal, business, utility aircraft equal to or greater than 12,500 lb (5,670 kg) gross weight.
- 53 Commercial aircraft: propeller-driven, fixed-wing. Includes turbo props.
- 54 Commercial aircraft: jet and other turbine-powered, fixed-wing.
- Helicopters, nonmilitary. Includes gyrocopters.
- Military fixed-wing aircraft. Includes bomber, fighter, patrol, vertical takeoff and landing (fixed-wing vertical stall) aircraft.

- 57 Military non-fixed-wing aircraft. Includes helicopters.
- Balloon vehicles. Includes hot air balloons and blimps. 58
- 50 Aircraft, other.

Industrial, Agricultural, Construction Vehicles

- Construction vehicle. Includes bulldozers, shovels, graders, scrapers, trenchers, plows, tunneling equipment, 61 and road pavers.
- 63 Loader, industrial. Includes fork lifts, industrial tow motors, loaders, and stackers.
- 64
- 65 Agricultural vehicle, baler, chopper (farm use).
- 67 Timber harvest vehicle. Includes skycars, loaders.
- Industrial, construction, or agricultural vehicles, other. 60

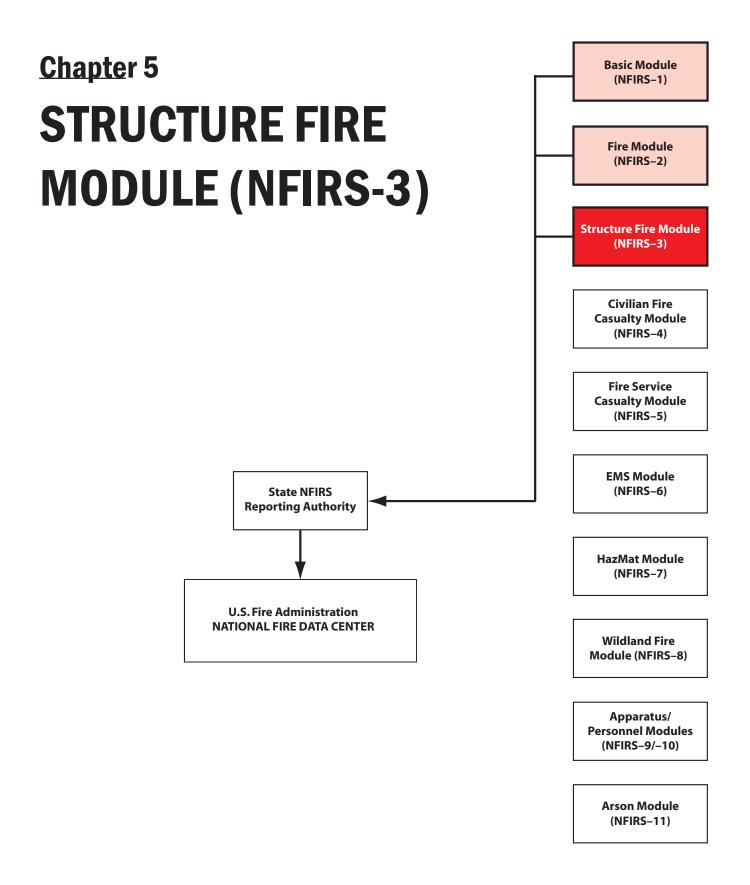
Mobile Property, Miscellaneous

- Home, garden vehicle. Includes riding lawnmowers, snow removal vehicles, riding tractors. Excludes equipment 71 where operator does not ride. See Equipment Involved in Ignition.
- 73 Shipping container, mechanically moved. Includes haulable trash containers, intermodal shipping containers.
- 74 Armored vehicle. Includes armored cars and military vehicles. Excludes armored aircraft and ships.
- 7.5 Missile, rocket, and space vehicles.
- 76 Aerial tramway vehicle.
- 00 Mobile property, other.
- NN No mobile property.

MOBILE PROPERTY MAKE CODES

AC	Acura	CO	Continental	GE	Geo
AG	Agco	CC	Crane Carrier (CCC)	GI	Giehl
AR	Alfa Romeo	CU	Cub Cadet	GL	Gleaner
AL	Allis Chalmers	DA	Daihatsu	GM	GMC (General Motors)
AV	Antique Vehicle	DE	Demco	GV	GVM
AN	Ariens	DR	Diamond Reo	HD	Harley Davidson
AM	Aston Martin	DI	Dixon	HV	Harvester
AT	ATK	DO	Dodge	HB	Haybuster
AU	Audi	DU	Ducati	HS	Hesston
AY	Avery	DT	Duetz	HI	Hino
BS	Belarus	DS	Duetz-Allis	НО	Honda
BE	Beta	DF	Duetz-Fahr	HG	Hough
BM	BMW	ER	Eager	HS	Husky
ВО	Bobcat	EA	Eagle	HU	Husqverna
BR	Briggs	EU	Euclid	HX	Hydrax
BL	Buell	FK	Farm King	HY	Hyundai
BU	Buick	FA	Farmall	IF	Infiniti
CD	Cadillac	FA	Farmall	IN	International
CA	Case	FM	Farmtrac	IL	International Farmall
CB	Case - David Brown	FE	Ferrari	IH	International Harvester
CI	Case IH	FT	Fetrel	IS	Isuzu
CP	Caterpillar	FO	Ford	IT	Italjet
CE	Century	FR	Freightliner	IV	Iveco
CH	Chevrolet	FG	Frigstad	JA	Jaguar
CR	Chrysler	FW	FWD	JE	Jeep
CV	Classic Vehicle	GH	Gehl	JD	John Deere

KA	Kawasaki	MO	Montesa	SD	Simon Duplex
KE	Kenworth	MW	Montgomery Ward	SI	Simplicity
KI	Kia	MG	Moto Guzzi	SN	Snapper
KZ	Kinze	MM	Moto Morini	SR	Steiger
KO	Kioti	MD	MTD	ST	Sterling
KN	Knight	MU	Murray	SU	Subaru
KM	Komatsu	NA	Navistar	SZ	Suzuki
KR	Krause	NH	New Holland	TT	Toro
KT	KTM	NE	New Idea	TO	Toyota
KU	Kubota	NI	Nissan	TL	Trelan
LC	Land Chief	OL	Oldsmobile	TR	Triumph
LR	Land Rover	OV	Oliver	TJ	Trojan
LT	Landtrac	OS	Oshkosh	Τ̈́B	Troy-Bilt
LE	Lexus	OW	Owatona	UD	UD [']
LI	Lincoln	PT	Peterbilt	UR	Ursus
LN	Long	PU	Peugeot	UT	Utilmaster
LO	Lotus	PI	Pierce	VR	Vermeer
MN	MacDon	PL	Plymouth	VS	Versatile
MK	Mack	PN	Pontiac	VE	Vespa
ML	Maely	PR	Porsche	VO	Volkswagen
MI	Mahindra	RN	Range Rover	VL	Volvo
MA	Maico	RD	Red Devil	VG	Volvo GMC
MH	Marmon	RG	Rogue (Ottowa)	WK	Walker
MS	Maserati	RR	Rolls Royce	WL	Walter
MY	Massey Ferguson	SB	Saab	WS	Western Star
MV	Massey Harris-Ferguson	SA	Saturn	WW	Westward
MZ	Mazda	SG	Scagg	WH	White
MJ	McKee	SC	Scania	WG	White GMC
ME	Melroe	SE	Sears Craftsman	WD	Woods
MB	Mercedes Benz	SD	Simon Duplex	YA	Yamaha
MC	Mercury	SI	Simplicity	YM	Yardman
MR	Merkur	SN	Snapper	YU	Yugo
MF	MHF	SC	Scania	ZT	Zetor
MT	Mitsubishi	SE	Sears Craftsman	OO	Other Make



Structure Type	truction se itinely used r renovation secured unsecured unsecured blished 13 Height Count the roof as p highest story. Total number of above grade.	Structure Fire Structure Fire OR
J3 Count the roof as part of Story of fire origin Below grade Number of stor (1 to 24% flame 12 Fire Spread If fire spread was confined to object of origin, do not check a box (Ref. Block D3, Fire Module). Confined to room of origin Confined to floor of origin Confined to floor of origin Confined to floor of origin	ries w/minor damage e damage) ries w/significant damage ne damage) ries w/heavy damage ne damage) ries w/extreme damage	K Type of Material Contributing Most to Flame Spread Check if no flame spread OR if same as Material First Ignited (Block D4, Fire Module) OR if unable to determine. K1 Litem contributing most to flame spread K2 Litype of material contributing most to flame spread Required only if item contributing code is 00 or <70.
L1 (In area of the fire) N None Present Skip to Section M 2 Hardwi 3 Plug-in 4 Hardwi 5 Plug-in 6 Mechal 7 Multiple Supplie 1 Smoke 2 Heat 3 Combination smoke and heat 4 Sprinkler, water flow detection 5 More than one type present 0 Other U Undetermined 1 Fire too 2 Operate 3 Failed to	1	
M1 Presence of Automatic Extinguishing System N	M3 Operation of Aut Extinguishing Sy Required if fire was within designed 1 Operated/effective 2 Operated/Not effect 3 Fire too small to act 4 Failed to operate (so Older Undetermined Other Undetermined Number of Spring Heads Operating Required if system operated.	ystem d range. Required if system failed or not effective. 1

I

CHAPTER 5 • STRUCTURE FIRE MODULE (NFIRS-3)

The Structure Fire Module (NFIRS-3) should be completed for all structure fires. A structure is an assembly of materials forming a construction for occupancy or use to serve a specific purpose. This includes, but is not limited to, buildings, open platforms, bridges, roof assemblies over open storage or process areas, tents, air-supported structures, and grandstands. Users may also optionally complete the Fire Module for confined building fires (Incident Types 113–118), although it is not required.

Like the other modules, the Structure Fire Module is divided into sections and further subdivided into blocks. Only Block I1 must be completed for all structure fires. Completion of the remainder of the module is required only for building fires, although that portion of the module may also be completed for non-building structure fires if desired.

SECTION I

This section collects information about the structure involved in the fire, including its type, current status, height, and size.

■ Structure Type ☆

Definition

The identification of a structure as a specific property type.

Purpose

Information on the structure type, combined with other structural characteristics, is useful for understanding fire behavior and provides assistance in targeting fire prevention or protection efforts.

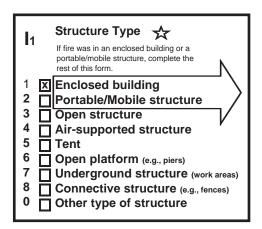
Entry

Check or mark the box best indicating the type of structure involved in the fire. If the fire was in an enclosed building or a portable or mobile structure, complete the rest of the module.

■ If the fire was not in an enclosed building (codes 0 and 3–8), no other entries on this module are required.

Example

The fire occurred in a two-story house (1):



STRUCTURE TYPE CODES

- 1 Enclosed building. Includes subway terminals and underground buildings.
- Fixed portable or mobile structure. Includes mobile homes, campers, portable buildings, and the like that are used as permanent fixed structures.
- 3 Open structure. Includes bridges, trestles, drilling structures, open stairways and walkways, and the like.
- 4 Air-supported structure.
- 5 Tent.
- 6 Open platform. Includes piers, wharves without a superstructure, loading docks without a roof, and the like.
- 7 Underground structure work area. Includes tunnels and mines. Excludes subway terminals and underground buildings (1).
- 8 Connective structure. Includes fences, telephone poles, and pipelines.
- 0 Structure type, other.

Building Status

Definition

The operational status of the building involved in the fire. This element indicates the actual use of the building at the time of the fire.

Purpose

Building status, combined with other structural characteristics, is useful for understanding fire behavior, the potential for loss of life and property, and the likely effectiveness of fire protection that existed before the fire.

Entry

Check or mark the box best indicating the status of the building involved in the fire.

Example

A family of four occupied the house (2):



l ₂ Building Status 🛣
1 ☐ Under construction 2 ☒ In normal use 3 ☐ Idle, not routinely used 4 ☐ Under major renovation 5 ☐ Vacant and secured 6 ☐ Vacant and unsecured 7 ☐ Being demolished 0 ☐ Other U ☐ Undetermined

BUILDING STATUS CODES

- 1 Under construction.
- In normal use. Includes properties that are closed or unoccupied for a brief period of time, such as business closed for the weekend or a house with no one at home.
- 3 Idle, not routinely used (furnishings are in place). Includes seasonal properties during the off-season.
- 4 Under major renovation.
- 5 Vacant and secured.
- 6 Vacant and unsecured.
- 7 Being demolished.
- 0 Building status, other.
- U Undetermined.

Building Height

Definition

The number of stories at or above grade level and the number of stories below grade level in the fire building.

Purpose

Building height and depth below grade, combined with other structural characteristics, are useful for pre-fire planning as well as for gaining a better understanding of fire behavior. Some fire departments use building height and depth to determine life safety hazard values. The more difficult it is for people to escape, the higher the life safety hazard value for the building.

Entry

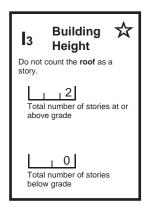
Enter the total number of stories at or above grade level and the total number of stories below grade level.

- For split grades, consider the main egress point as the "at grade" portion of the building.
- Do not count normally inaccessible attics, attics with less than standing height, or the roof as a story (i.e., the roof is counted as part of the highest story).

I

Example

The house was two stories high with no basement:



■ Main Floor Size ☆

Definition

The size of the main floor in square feet. This is an estimate.

Purpose

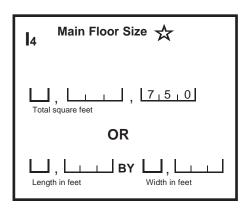
Main floor size, combined with other structural characteristics, is useful for evaluating firefighting operations and the need to allocate resources based on size and complexity of structures. It also helps in understanding the potential life and property at risk.

Entry

Enter the total square footage of the main floor, or enter the area using length-by-width measurements (in feet). Do not enter both.

Example

The main floor was 750 square feet:



SECTION J

This section collects information on where in the structure the fire originated, how far the fire spread, and the number of stories damaged by flame.

□ Fire Origin ☆

Definition

Identifies the story where the fire originated within the building.

Purpose

The story of fire origin, combined with other structural characteristics, is helpful for gaining a better understanding of fire behavior and identifying any special problems in fire strategy and tactics. Information on the frequency and nature of above- or below-grade-level fires is needed for assessing aerial apparatus needs and performance. A fire in the upper levels of a high-rise building is often difficult to control because of delays in moving personnel and equipment to the fire floor.

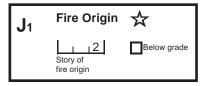
Entry

Enter the story of fire origin. If below grade level, check or mark the Below Grade box.

Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example

The fire began in the master bedroom on the second story:



Fire Spread ☆

Definition

The extent of fire spread in terms of how far the flame damage extended. The extent of flame damage is the area actually burned or charred and does not include the area receiving only heat, smoke, or water damage.

Purpose

In combination with other information, this element describes the magnitude or seriousness of the fire. It can be used to evaluate the effectiveness of built-in fire protection features or the effectiveness of the fire suppression force relative to the conditions faced. The confinement and extinguishment of a fire is influenced by many factors. Fire spread indicates the combined effect of these conditions. Also, the analysis of fire spread over many fires can reveal the effects of individual factors.

J

Entry

Check or mark the box best describing the extent of fire spread.

- If the fire was confined to the object of origin, an entry should have been made in Block D3 of the Fire Module. Do not check or mark any additional box in this block.
- A room is a partitioned part of the inside of a building. If the flame damage extends beyond the area of origin in a one-room building, such as a shed, the damage should be described as Confined to the Building of Origin. The Confined to the Building of Origin box is also the appropriate description if the fire was on the roof or outside wall of a building.

Example

A fire causes flame damage only in the room of origin (2):



FIRE SPREAD CODES

- 1 Confined to object of origin.
- 2 Confined to room of origin.
- 3 Confined to floor of origin.
- 4 Confined to building of origin.
- 5 Beyond building of origin.

Number of Stories Damaged by Flame

Definition

The number of stories damaged by flame spread. Flame damage is the area actually burned or charred and does not include areas receiving only heat, smoke, or water damage.

Purpose

In combination with other information, this element describes the magnitude or seriousness of the fire. It can be used to evaluate the effectiveness of built-in fire protection features or the effectiveness of the fire suppression force relative to the conditions faced. The confinement and extinguishment of a fire is influenced by many factors. Fire spread indicates the combined effect of these conditions. Also, the analysis of fire spread over many fires can reveal the effects of individual factors.

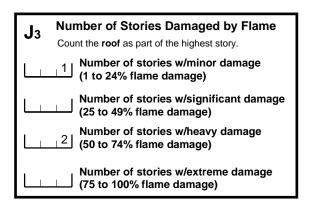
Entry

Enter the number of stories damaged by flame according to the indicated criteria.

Count the roof as part of the top story.

Example

Two stories were heavily damaged by the fire, and one story had only minor flame damage:



SECTION K

This section captures information on the actual item and material that were most involved in the spread of the fire (if different from the item first ignited).

Check or mark the box at the top of this section and skip to Section L if (1) there was no significant flame spread, (2) the flame spread was confined to the material first ignited, or (3) determining the flame spread was not possible.

Item Contributing Most to Flame Spread

Definition

The item contributing most to flame spread, if different from the Item First Ignited (Fire Module, Block D3).

Purpose

This information helps determine why fires advance through a structure and understand the rate at which they develop. A study of this entry also aids in assessing the need for flammability standards and other safety standards. This information can also be helpful to manufacturers for product improvement.

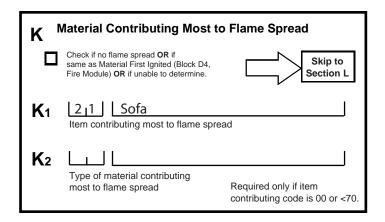
Entry

Enter the two-digit code and description best describing the item contributing most to flame spread.



Example

A sofa (21) contributed most to flame spread:



An alphabetized synonym list for the following Item Contributing Most to Flame Spread codes is presented in Appendix B.

ITEM CONTRIBUTING MOST TO FLAME SPREAD CODES

Structural Component, Finish

- 11 Exterior roof covering, surface, finish.
- 12 Exterior sidewall covering, surface, finish. Includes eaves.
- Exterior trim, appurtenances. Includes doors, porches, and platforms.
- 14 Floor covering or rug/carpet/mat, surface.
- Interior wall covering. Includes cloth wall coverings, wood paneling, and items permanently affixed to a wall or door. Excludes curtains and draperies (36) and decorations (42).
- 16 Interior ceiling covering or finish. Includes cloth permanently affixed to ceiling and acoustical tile.
- 17 Structural member or framing.
- Thermal, acoustical insulation within wall, partition or floor/ceiling space. Includes fibers, batts, boards, loose fills.
- 10 Structural component or finish, other.

Furniture. Utensils. Includes built-in furniture.

- 21 Upholstered sofa, chair, vehicle seats.
- Non-upholstered chair, bench.
- Cabinetry. Includes filing cabinets, pianos, dressers, chests of drawers, desks, tables, and bookcases. Excludes TV sets, bottle warmers, and appliance housings (25).
- 24 Ironing board.
- 25 Appliance housing or casing.
- Household utensils. Includes kitchen and cleaning utensils.
- Furniture, utensils, other.

Soft Goods, Wearing Apparel

- 31 Mattress, pillow.
- 32 Bedding: blanket, sheet, comforter. Includes heating pads.
- 33 Linen, other than bedding. Includes towels and tablecloths.
- Wearing apparel not on a person.
- Wearing apparel on a person.

- 36 Curtain, blind, drapery, tapestry.
- 37 Goods not made up. Includes fabrics and yard goods.
- 38 Luggage.
- 30 Soft goods, wearing apparel, other.

Adornment, Recreational Material, Signs

- 41 Christmas tree.
- 42 Decoration.
- 43 Sign. Includes outdoor signs such as billboards.
- 44 Chips. Includes wood chips.
- 45 Toy, game.
- 46 Awning, canopy.
- 47 Tarpaulin, tent.
- 40 Adornment, recreational material, signs, other.

Storage Supplies

- Box, carton, bag, basket, barrel. Includes wastebaskets.
- Material being used to make a product. Includes raw materials used as input to a manufacturing or construction process. Excludes finished products.
- Pallet, skid (empty). Excludes palletized stock (58).
- 54 Cord, rope, twine, yarn.
- 55 Packing, wrapping material.
- 56 Baled goods or material. Includes bale storage.
- 57 Bulk storage.
- Palletized material, material stored on pallets.
- Rolled, wound material. Includes rolled paper and fabrics.
- 50 Storage supplies, other.

Liquids, Piping, Filters

- 61 Atomized, vaporized liquid. Included are aerosols.
- Flammable liquid/gas (fuel) in or escaping from combustion engines.
- Flammable liquid/gas in or escaping from final container or pipe before engine or burner. Includes piping between the engine and the burner.
- 64 Flammable liquid/gas in or escaping from container or pipe. Excludes engines, burners, and their fuel systems.
- 65 Flammable liquid/gas, uncontained. Includes accelerants.
- Pipe, duct, conduit, hose.
- Pipe, duct, conduit, or hose covering. Includes insulating materials whether for acoustical or thermal purposes, and whether inside or outside the pipe, duct, conduit, or hose.
- 68 Filter. Includes evaporative cooler pads.
- 60 Liquids, piping, filters, other.

Organic Materials

- 71 Agricultural crop. Includes fruits and vegetables.
- Light vegetation (not crop). Includes grass, leaves, needles, chaff, mulch, and compost.
- 73 Heavy vegetation (not crop). Includes trees and brush.
- 74 Animal, living or dead.
- 75 Human, living or dead.
- 76 Cooking materials. Includes edible materials for man or animal. Excludes cooking utensils (26).
- 77 Feathers or fur. Excludes feathers or fur not on bird or animal, and not processed into a product.
- 70 Organic materials, other.

General Materials

- Electrical wire, cable insulation. Do not classify the insulation on the wiring as the item first ignited unless there were no other materials in the immediate area, such as might be found in a cable tray or electrical vault.
- 82 Transformer. Includes transformer fluids.
- 83 Conveyor belt, drive belt, V-belt.
- 84 Tire.
- 85 Railroad ties.
- 86 Fence, pole.
- 87 Fertilizer.
- 88 Pyrotechnics, explosives.

General Materials Continued

- 91 Book.
- 92 Magazine, newspaper, writing paper. Includes files.
- 93 Adhesive.
- 94 Dust, fiber, lint. Includes sawdust and excelsior.
- Film, residue. Includes paint, resin, and chimney film or residue and other films and residues produced as a by-product of an operation.
- 96 Rubbish, trash, waste.
- 97 Oily rags.
- 00 Item contributing most to flame spread, other.
- UU Undetermined.

Type of Material Contributing Most to Flame Spread

This field is required only if the Item Contributing Most to Flame Spread code is "00" or a number less than "70."

Definition

The type of material contributing most to flame spread, if different from the Type of Material First Ignited (Fire Module, Block D4). Skip this block if the material is unknown.

Type of material refers to the raw, common, or natural state in which the material exists. The type of material may be a gas, flammable liquid, chemical, plastic, wood, paper, fabric, or any number of other materials.

Purpose

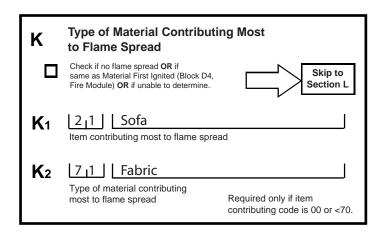
Knowing what type of material contributed most to flame spread is helpful in finding out why fires advance through a structure and understanding the rate at which fires develop. A study of this entry also aids in assessing the need for standards on the flammability of materials. This information can also be helpful to manufacturers for improving products.

Entry

Enter the two-digit code and description that best describes the type of material contributing most to flame spread.

Example

The fabric (71) that the sofa was upholstered with contributed most to flame spread:



An alphabetized synonym list for the following Type of Material Contributing Most to Flame Spread codes is presented in Appendix B.

TYPE OF MATERIAL CONTRIBUTING MOST TO FLAME SPREAD CODES

Flammable Gas

- 11 Natural gas. Includes methane and marsh gas.
- 12 LP gas. Includes butane, butane and air mixtures, and propane gas.
- 13 Anesthetic gas.
- 14 Acetylene gas
- 15 Hydrogen.
- Flammable gas, other. Includes benzene, benzol, carbon disulfide, carbon monoxide, ethylene, ethylene oxide, and vinyl chloride.

Flammable or Combustible Liquid

- 21 Ether, pentane-type flammable liquid. Includes all Class 1A flammable liquids.
- JP-4 jet fuel and methyl-ethyl-ketone-type flammable liquid. Includes all Class 1B flammable liquids. Excludes gasoline (23).
- 23 Gasoline.
- Turpentine, butyl-alcohol-type flammable liquid. Includes all Class IC flammable liquids.
- 25 Kerosene; Nos.1 and 2 fuel oil; diesel-type combustible liquid. Includes all Class II combustible liquids.
- Cottonseed oil; Nos. 4, 5, and 6 fuel oil; creosote-oil-type combustible liquid. Includes all Class IIIA combustible liquids.
- 27 Cooking oil, transformer oil, lubricating oil. Includes all Class IIIB combustible liquids.
- 20 Flammable or combustible liquid, other.

Volatile Solid or Chemical

- Fat, grease, butter, margarine, lard, tallow.
- 32 Petroleum jelly and nonfood grease.
- 33 Polish, paraffin, wax.
- 34 Adhesive, resin, tar, glue, asphalt, pitch, soot.

- 35 Paint, varnish—applied.
- 36 Combustible metal. Includes magnesium, titanium, and zirconium.
- Solid chemical. Includes explosives. Excludes liquid chemicals (division 2) and gaseous chemicals (division 1).
- 38 Radioactive material.
- 30 Volatile solid or chemical, other.

Plastics

Plastic, regardless of type. Excludes synthetic fibers, coated fabrics, plastic upholstery.

Natural Product

- Rubber, tire rubber. Excludes synthetic rubbers (classify as plastics (41)).
- 52 Cork.
- 53 Leather.
- 54 Hay, straw.
- Grain, natural fiber. Includes cotton, feathers, felt, barley, corn, coconut. Excludes fabrics and furniture batting (71).
- Coal, coke, briquettes, peat. Includes briquettes of carbon black and charcoal.
- 57 Food, starch. Includes flour. Excludes fat or grease (31).
- 58 Tobacco.
- Natural product, other. Includes manure.

Wood or Paper – Processed

- Wood chips, sawdust, wood shavings.
- Round timber. Includes round posts, poles, and piles.
- 63 Sawn wood. Includes all finished lumber and wood shingles.
- 64 Plywood.
- Fiberboard, particleboard, and hardboard. Includes low-density pressed wood fiberboard products.
- 66 Wood pulp, wood fiber.
- Paper. Includes cellulose, waxed paper, sensitized paper, and ground-up processed paper and newsprint used as thermal insulation.
- 68 Cardboard.
- 60 Wood or paper, processed, other.

Fabric, Textiles, Fur

- 71 Fabric, fiber, cotton, blends, rayon, wool, finished goods. Includes yarn and canvas. Excludes fur and silk (74).
- 74 Fur, silk, other fabric, finished goods. Excludes fabrics listed in Code 71.
- 75 Wig.
- 76 Human hair.
- 77 Plastic-coated fabric. Includes plastic upholstery fabric and other vinyl fabrics.
- 70 Fabric, textiles, fur, other.

Material Compounded With Oil

- 81 Linoleum.
- 82 Oilcloth.
- 86 Asphalt-treated material. Excludes by-products of combustion, soot, carbon, creosote (34).
- 80 Material compounded with oil, other.
- Type of material contributing most to flame spread, other.
- UU Undetermined.

SECTION L

These data elements identify the type and operating principle of detectors present in the area of origin or in near proximity to the area of origin such that they would be instrumental in detecting the fire in its early stages.

■ Presence of Detectors ☆

Definition

The existence of fire detection equipment within its designed range of the fire.

Purpose

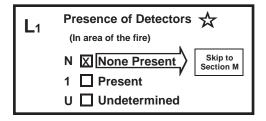
Knowing whether or not detectors were present at the fire is useful for evaluating their effectiveness can be evaluated if they were present and within their designed range.

Entry

Check or mark the box that best describes the presence of detectors. If no detectors were present within their designed range of the fire, check or mark the None Present box and skip to Section M.

Example

No detectors (N) were present in a structure where the fire occurred:



PRESENCE OF DETECTORS CODES

- 1 Present.
- N None present.
- U Undetermined.

Detector Type

Definition

Identifies the type of fire detection system that was present in the area of fire origin.

Purpose

The type of detectors present at the fire is important to the understanding of fire control and life safety in properties with and without detection equipment.

L

Entry

Check or mark the box that indicates the type of detector present in the area of fire origin.

This field is required if the fire was within the designed range of the detector.

Example

A smoke detector (1) was present in the area of fire origin:

L ₂	Detector Type
2	Smoke Heat Combination smoke and heat Sprinkler, water flow detection More than one type present Other Undetermined

DETECTOR TYPE CODES

- 1 Smoke.
- 2 Heat.
- 3 Combination smoke and heat in a single unit.
- 4 Sprinkler, water flow detection.
- 5 More than one type present.
- 0 Detector type, other.
- U Undetermined.

Detector Power Supply

Definition

Identifies the type of power supplying the detector.

Purpose

The reliability of detectors present at a fire is an important part of detector performance, especially if maintenance was poor or a power failure occurred before or during the fire.

∟ntry

Check or mark the box best indicating the type of power supply used by the detector.

This field is required if the fire was within the designed range of the detector.



Example

The smoke detector ran on battery (1) power:

L ₃	Detector Power Supply
1	■ Battery only
2	☐ Hardwire only
3	☐ Plug-in
4	☐ Hardwire with battery
5	☐ Plug-in with battery
6	■ Mechanical
7	■ Multiple detectors & power
	supplies
0	∐ Other
U	☐ Undetermined

DETECTOR POWER SUPPLY CODES

- 1 Battery only.
- 2 Hardwire only.
- 3 Plug-in.
- 4 Hardwire with battery backup.
- 5 Plug-in with battery backup.
- 6 Mechanical. Includes spring-wound, stored pressure source, etc.
- 7 Multiple detectors and power supplies.
- 0 Detector power supply, other.
- U Undetermined.

Detector Operation

Definition

The operation and effectiveness of the detector relative to the area of fire origin.

Purpose

The information on the usage, reliability, and effectiveness of automatic detection equipment is important to the understanding of fire control and life safety with and without detection equipment. This item is not designed to evaluate any alarm transmission capability of the system, only the detection of the fire.

Entry

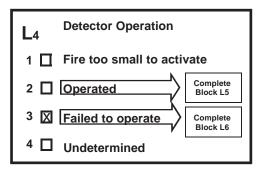
Check or mark the box best describing the location and operation of the detector.

This field is required if the fire was within the designed range of the detector.

L

Example

The smoke detector failed to operate (3):



DETECTOR OPERATION CODES

- 1 Fire too small to activate detector.
- 2 Detector operated.
- 3 Detector failed to operate.
- U Undetermined.

Detector Effectiveness

Definition

The effectiveness of the fire detection equipment in alerting occupants.

Purpose

Information on the effectiveness of automatic detection equipment is important for understanding whether fire detection equipment is accomplishing the task for which it is designed.

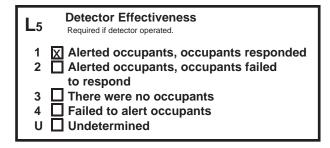
Entry

Check or mark the box best describing the effectiveness of the detector.

This field is required if the detector operated.

Example

Heat detectors in the room of origin alerted the building occupants (1), who promptly evacuated:



DETECTOR EFFECTIVENESS CODES

- 1 Detector alerted occupants, occupants responded.
- 2 Detector alerted occupants, occupants failed to respond.
- 3 There were no occupants.
- 4 Detector failed to alert occupants.
- U Undetermined.

Detector Failure Reason

Definition

The reason why the detector failed to operate or did not operate properly.

Purpose

Information on why automatic detection equipment did not operate is important to the evaluation of detection equipment and can be used to improve reliability or installation of detectors.

Entry

Check or mark the box best describing why the detector failed to operate or did not operate properly.

This field is required if the detector failed to operate.

Example

Heat detectors in the room of origin did not activate because they were improperly installed (2):

L ₆	Detector Failure Reason
	Required if detector failed to operate
1 2 3 4	 ☐ Power failure, shutoff, or disconnect ☑ Improper installation or placement ☐ Defective ☐ Lack of maintenance, includes not cleaning
5 6 0 U	☐ Battery missing or disconnected ☐ Battery discharged or dead ☐ Other ☐ Undetermined

DETECTOR FAILURE REASON CODES

- Power failure or hardwired detector shut off or disconnected.
- 2 Improper installation or placement of detector.
- 3 Defective detector.
- 4 Lack of maintenance. Includes not cleaning.
- 5 Battery missing or disconnected.
- 6 Battery discharged or dead.
- 0 Detector failure reason, other.
- U Undetermined.

M

SECTION M

These data elements identify the type and operating principle of an automatic extinguishing system (AES) present in the area of origin or in near proximity to the area of origin such that it would be instrumental in suppressing the fire in its early stages.

■ Presence of Automatic Extinguishing System ☆

Definition

The existence of an AES within the AES's designed range of a fire.

Purpose

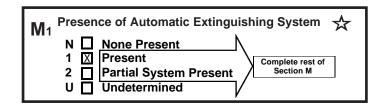
If an AES was present at the fire, its effectiveness can be evaluated if it was within its designed range of the fire.

Entry

Check or mark the box that best describes the presence of an AES. If no AES was present, check or mark the None Present box; no other entries are required on this module.

Example

An AES was present (1) in the structure where the fire occurred:



PRESENCE OF AUTOMATIC EXTINGUISHING SYSTEM CODES

- 1 Present.
- 2 Partial System Present.
- N None present.
- U Undetermined.

■ Type of Automatic Extinguishing System

Definition

Identifies the type of automatic extinguishing system that was present in the area of fire origin.

Purpose

Information on the type of AES present at the fire is important to the understanding of fire control and life safety in properties with and without automatic extinguishing system.

Entry

Check or mark the box that indicates the type of AES present in the area of fire origin. If multiple systems are present, indicate the system designed to protect the hazard where the fire started.

This field is required if the fire was within the designed range of the AES.

Example

The AES was a wet-pipe sprinkler system (1):

M ₂	Type of Automatic Extinguishing System Required if fire was within designed range of AES
1	Wet-pipe sprinkler
2	□ Dry-pipe sprinkler
3	☐ Other sprinkler system
4	☐ Dry chemical system
5	☐ Foam system
6	☐ Halogen-type system
7	☐ Carbon dioxide (CO₂) system
0	☐ Other special hazard system
U	☐ Undetermined

TYPE OF AUTOMATIC EXTINGUISHING SYSTEM CODES

- 1 Wet-pipe sprinkler system.
- 2 Dry-pipe sprinkler system.
- 3 Other sprinkler system. Includes deluge sprinkler systems and pre-action sprinkler systems.
- 4 Dry chemical system.
- 5 Foam system.
- 6 Halogen-type system. Includes nonhalogenated suppression systems that operate on the same principle.
- 7 Carbon dioxide system.
- O Special hazard system, other.
- U Undetermined.

Operation of Automatic Extinguishing System

Definition

The operation and effectiveness of the automatic extinguishing system relative to the area of fire origin.

Purpose

Knowing the usage, reliability, and effectiveness of AESs is important to the understanding of fire control and life safety in buildings with and without extinguishing equipment.

Entry

Check or mark the box that indicates if the AES operated and was or was not effective. Effective does not necessarily mean complete extinguishing, but the system must at least contain and control the fire until the fire department can complete extinguishment.

Example

The fire was too small to activate the system (3):

M3	Operation of Automatic Extinguishing System uired if fire was within designed range
2	Operated & effective (go to M4) Operated & not effective (go to M4) Fire too small to activate Failed to operate (go to M5) Other Undetermined

OPERATION OF AUTOMATIC EXTINGUISHING SYSTEM CODES

- 1 System operated and was effective.
- 2 System operated and was not effective.
- Fire too small to activate the system.
- 4 System did not operate.
- Operation of AES, other.
- U Undetermined...

Number of Sprinkler Heads Operating

Definition

The total number of sprinkler heads that operated during the fire.

Purpose

Recording the number of sprinkler heads that operated is useful in determining how fast the fire developed. This is not an indication of the effectiveness of the sprinkler system.

Entry

Enter the total number of sprinkler heads that operated during the fire. This field is required if the sprinkler system activated.

Example

One sprinkler head activated:



Reason for Automatic Extinguishing System Failure

Definition

The reason why the automatic extinguishing system failed to operate or did not operate properly.

Purpose

Information on the effectiveness of an AES is important for understanding the reasons why systems fail so they can be redesigned or additional safeguards put in place.

Entry

Check or mark the box that best describes why the AES failed to operate or was not effective.

This field is required if the system failed to operate.

Example

The system did not operate because the fire was in the ceiling space above the AES (5):

M ₅ Reason for Automatic Extinguishing System Failure
Required if system failed or not effective
1 ☐ System shut off 2 ☐ Not enough agent discharged 3 ☐ Agent discharged but did not
reach fire 4 Wrong type of system 5 Fire not in area protected 6 System components damaged
7 ☐ Lack of maintenance 8 ☐ Manual intervention 0 ☐ Other U ☐ Undetermined

REASON FOR AUTOMATIC EXTINGUISHING SYSTEM FAILURE CODES

- 1 System shut off.
- 2 Not enough agent discharged to control the fire.
- 3 Agent discharged, but did not reach the fire.
- 4 Inappropriate system for the type of fire.
- 5 Fire not in area protected by the system.
- 6 System components damaged.
- 7 Lack of maintenance. Includes corrosion or heads painted.
- 8 Manual intervention defeated the system.
- 0 Reason system not effective, other.
- U Undetermined.

Chapter 6 Basic Module CIVILIAN FIRE (NFIRS-1) **CASUALTY MODULE Fire Module** (NFIRS-2) (NFIRS-4) **Structure Fire Module** (NFIRS-3) **Civilian Fire Casualty Module** (NFIRS-4) **Fire Service Casualty Module** (NFIRS-5) **EMS Module State NFIRS** (NFIRS-6) **Reporting Authority HazMat Module** (NFIRS-7)

U.S. Fire Administration NATIONAL FIRE DATA CENTER

(NFIRS-11)

Arson Module

Wildland Fire Module (NFIRS-8)

Apparatus/ Personnel Modules (NFIRS-9/-10)

A		
B Injured Person L First Name	Gender 1 ☐Male MI Last Name	2 Female C Casualty Number Suffix Casualty Number
OR Date of Birth Months (for infants) OR OR Date Month Day Year 2 3 4 5 0 U E2 1	Race White Black, African American Am. Indian, Alaska Native Asian Native Hawaiian, Other Pacific Islander Other, multiracial Undetermined Ethnicity 1	not fire department 1
Cause of Injury Exposed to fire products include heat, smoke, and gas Exposed to toxic fumes other the grade of the g	contributing to Injury than smoke Check all applicable boxes 1 Asleep 2 Unconscious 3 Possibly impaired by alcol	er drug Contributing factor (2)
1	M1 Location at Time of Incident 1	M3 Story at Start of Incident Complete ONLY if injury occurred INSIDE Story at start of incident M4 Story Where Injury Occurred Story where injury occurred, if Below grade M5 Specific Location at Time of Injury Complete ONLY if casualty NOT in area of origin Specific location at time of injury
N Primary Apparent Symptom O1 Smoke only, asphyxiation 11 Burns and smoke inhalati 12 Burns only 21 Cut, laceration 33 Strain or sprain 96 Shock 98 Pain only Look up a code only if the symptom is NOT found above		P Disposition ☐Transported to emergency care facility Remarks Local option NFIRS-4 Revision 01/01/04

CHAPTER 6 • CIVILIAN FIRE CASUALTY MODULE (NFIRS-4)

The Civilian Fire Casualty Module should be completed whenever there are civilian casualties resulting from a fire. A fire casualty is a person who is injured or killed as a result of a fire, including injuries or deaths from natural or accidental causes sustained while involved in the activities of fire control, attempting rescue, or escaping from the dangers of the fire. Fires include Incident Types 100–199 as recorded on the Basic Module, Section C.

• If a civilian injury is not directly related to fire, it may be reported on an EMS Module with the same incident ID information.

A separate Civilian Fire Casualty Module is required for each fire casualty.

SECTION A

The guidance and directions for completing Section A of the Civilian Fire Casualty Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Civilian Fire Casualty Module must be identical with the entries on the corresponding Basic Module. If injuries occur in an exposure fire, the casualty report should have the same entries as those from Section A of the Basic Module for that exposure fire. An example of a completed Section A can be found on page 3–8.

■ Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date 🏠

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🏠

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number

Entry

If the casualty resulted from an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition

Indicates a change to information submitted on a previous Civilian Fire Casualty Module or a deletion of all information regarding the casualty.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this civilian casualty and now want to have the data on this casualty deleted from the database. If this box is marked, complete Section A, the Casualty Number originally assigned (Section C), and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Injured Person

Definition

The first name, middle initial, last name, and gender that identifies the casualty.

Purpose

The name of the casualty may be required for legal purposes. It may also be useful for notification to employers, for insurance purposes, and for filing disability claims.

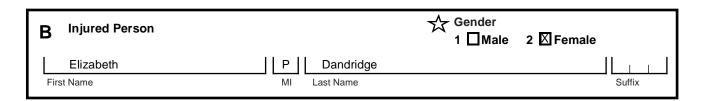
Entry

Enter the full name of the person. Names should be clearly printed or typed. Check or mark the appropriate box that indicates the injured person's gender.

Gender is a required field.

Example

The casualty's name is Elizabeth P. Dandridge:



GENDER CODES

- 1 Male.
- 2 Female.

SECTION C

Casualty Number

Definition

A unique number is assigned to each casualty occurring at a single incident or resulting from an incident.

Purpose

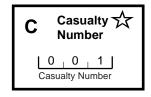
The casualty number identifies each casualty separately in the casualty file. Data and information concerning the casualty can be accessed using this number in conjunction with other unique field information.

Entry

Enter the casualty number assigned to this casualty. A separate Casualty Number is assigned to each casualty. The first casualty is always coded "001," and each succeeding casualty is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.

Example

There were four casualties as a result of a vehicle fire; the first casualty's number is 001:



SECTION D

Age or Date of Birth

Enter either the fire casualty's age or the casualty's date of birth. Do not enter both.

Age ☆

Definition

The casualty's age in years or, if the casualty is an infant, the age in months.

Purpose

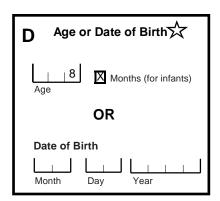
The age of the casualty provides a critical piece of demographic information on fire losses and allows further analysis of population groups at high risk from fires. This information is important for prevention efforts and allows NFIRS fire casualty data to be combined with other fire mortality or demographic databases.

Entry

Enter the age of the casualty. Estimate the age if it cannot be determined. If the age is calculated in months, check or mark the Months (for Infants) box.

Example

The casualty was an 8-month-old baby:



Date of Birth ☆

Definition

The month, day, and year of birth of the casualty.

Purpose

This data element is an alternative entry for Age. It can provide an indication of fire loss, and can be used to indicate type, severity, and cause of injury to identify trends and patterns that might be helpful in planning injury prevention techniques.

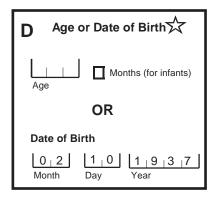
This data element is used as an alternate method for calculating the casualty's age. Age is collected in NFIRS but Date of Birth is not.

Entry

Enter the date of birth showing the month, day, and year (mm/dd/yyyy).

Example

A casualty was born on February 10, 1937



SECTION E

Race

Definition

The identification of the race of the casualty, based on U.S. Office of Management and Budget (OMB) designations.

Purpose

This entry is useful for the study of diseases and important to data systems in order to obtain certain Federal or State funds that are directed toward specific racial groups.

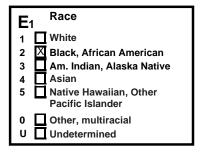
Entry

Check or mark the appropriate box. If race cannot be determined, check or mark the Undetermined box.

Hispanic is not considered a race, because a person can be black and Hispanic, white and Hispanic, etc.

Example

The casualty was an African American (2):



RACE CODES

- 1 White.
- 2 Black or African American.
- 3 American Indian or Alaska Native.
- 4 Asian.
- 5 Native Hawaiian or other Pacific Islander.
- 0 Other. Includes multiracial.
- U Undetermined.

Ethnicity

Definition

Identifies the ethnicity of the casualty. Ethnicity is an ethnic classification or affiliation. Ethnicity designates a population subgroup having a common cultural heritage, as distinguished by customs, characteristics, language, common history, etc. Currently, Hispanic/Latino is the only OMB designation for ethnicity.

Purpose

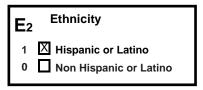
This entry permits an analysis of casualties by ethnicity with type, severity, and cause of injury to identify trends and patterns that might be helpful in planning casualty prevention techniques. It is also useful for studies of diseases and important to data systems in order to obtain certain Federal or State funds that are directed toward specific ethnic groups.

Entry

Check or mark the appropriate box.

Example

The casualty was an Hispanic (1):



ETHNICITY CODES

- 1 Hispanic or Latino.
- 0 Non Hispanic or Latino.

SECTION F

Affiliation

Definition

Indicates whether the casualty involved in the incident was an emergency services responder or a civilian.

Firefighter casualties are not reported on this module; instead, use the Fire Service Casualty Module (NFIRS-5).

Non-firefighter casualties who may be injured directly by the fire include:

Civilian: Non-emergency services personnel such as occupants, passers-by, and onlookers.

EMS: Emergency EMS personnel who are not members of the fire department.

Police: Persons from law enforcement agencies working at the scene.

Other: Persons working at the scene from other public or private service organizations such as the utility company, other city agencies, the Red Cross, the Salvation Army, etc.

Purpose

This entry identifies the groups suffering casualties. This information, along with data on the cause of the casualty and associated incident, can help target programs for reducing casualties and can be used to measure their success.

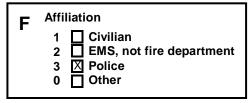
Entry

Check or mark the box that best describes the casualty's affiliation.

• If an injury occurs to EMS fire service personnel, use the Fire Service Casualty Module instead.

Example

A police officer (3) falls and sprains his ankle while helping an occupant leave an apartment building that was on fire:



AFFILIATION CODES

- 1 Civilian.
- 2 EMS, not fire department.
- 3 Police.
- 0 Other.



SECTION G

Date and Time of Injury

Date

Entry

Enter the month, day, and year when the injury occurred (mm/dd/yyyy). (See example at Time.)

Time

Definition

The time of day, using the 24-hour clock, when the injury occurred. Midnight is 0000 and signifies the start of a new day.

Purpose

This information is sometimes needed for legal or insurance purposes. It is most frequently used to analyze the time of day fatalities occur for different types of incidents.

Entry

Enter as closely as possible the time when the injury occurred using the 24-hour clock (i.e., 0000–2359). This could be before or after the alarm time shown on the Basic Module.

Example

A woman burned her hand at 5:25 p.m. on May 2, 2002:



SECTION H

■ Severity ☆

Severity was known as Case Severity in NFIRS 4.1.

Definition

The relative severity or seriousness of the injury on a scale from "least serious" (minor) to "most serious" (death).

Purpose

The severity of a casualty's injury is often used as an indicator of the impact of the incident. It can be used as a measure for prevention programs aimed at reducing injuries and deaths.



Entry

Check or mark the box that best describes the severity of the injury.

Example

A second degree burn (2) on the forearm and shoulder:



SEVERITY CODES

- 1 Minor. The patient is not in danger of death or permanent disability. Immediate medical care is not necessary.
- Moderate. There is little danger of death or permanent disability. Quick medical care is advisable. This category includes injuries such as fractures or lacerations requiring sutures.
- 3 Severe. The situation is potentially life threatening if the condition remains uncontrolled. Immediate medical care is necessary even though body processes may still be functioning and vital signs may be normal.
- 4 Life threatening. Death is imminent; body processes and vital signs are not normal. Immediate medical care is necessary. This category includes cases such as severe hemorrhaging, severe multiple trauma, and multiple internal injuries.
- 5 Death.
- U Undetermined.

SECTION I

Cause of Injury

Definition

The physical event that caused the injury.

Purpose

This is another dimension in describing the cause of an injury and how and why the injury occurred. The analysis of this information may further an understanding of the conditions causing the injury and provide a means for planning suitable preventive techniques.

Entry

Check or mark the box that best describes the cause of the injury.

J

Example

The fire burned (1) the victim's hand:

Cause of Injury
1 🗵 Exposed to fire products including flame, heat, smoke, and gas
2 Exposed to toxic fumes other than smoke
3 Jumped in escape attempt
4 🔲 Fell, slipped, or tripped
5 ☐ Caught or trapped
6 Structural collapse
7 Struck by or contact with object
8 Overexertion or strain
9 Multiple causes
0 ☐ Other
U Undetermined

CAUSE OF INJURY CODES

- Exposed to fire products, such as flame, heat, smoke, or gas.
- 2 Exposed to hazardous materials or toxic fumes other than smoke.
- 3 Jumped in escape attempt.
- 4 Fell, slipped, or tripped.
- 5 Caught or trapped.
- 6 Structural collapse.
- 7 Struck by or contact with object. Includes assaults by persons or animals.
- 8 Overexertion or strain.
- 9 Multiple causes.
- 0 Cause of injury, other.
- U Undetermined.

SECTION J

Human Factors Contributing to Injury

Human Factors Contributing to Injury was known as Condition Before Injury in NFIRS 4.1.

Definition

The physical or mental state of the person before becoming a casualty.

Purpose

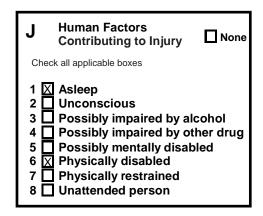
One purpose for understanding the human factors that contributed to the injury is to design programs that specifically deal with the problems either through education or by reengineering the environment.

Entry

Check or mark all applicable boxes describing the human factors that contributed to this person's injury. If no preexisting human factors contributed to the injury, check or mark the None box.

Example

A disabled man (6) was asleep (1) in a wheelchair when the fire trapped him in the room:



HUMAN FACTORS CONTRIBUTING TO INJURY CODES

- 1 Asleep, no known impairment.
- 2 Unconscious.
- 3 Possibly impaired by alcohol.
- 4 Possibly impaired by other drug or chemical.
- 5 Possibly mentally disabled.
- 6 Physically disabled. Includes temporary conditions or overexertion.
- 7 Physically restrained.
- 8 Unattended or unsupervised person. Includes persons too young/old to act.
- N None.

SECTION K

I Factors Contributing to Injury

Definition

The most significant factors contributing to the injury of the casualty.

Purpose

This additional information on how an injury occurred can help in targeting fire prevention programs and checking the adequacy and enforcement of codes. For example, if many casualties resulted from illegally locked window bars, inspection practices might need to be reviewed.

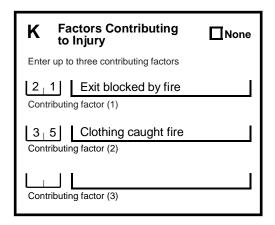
Entry

Enter the two-digit code and description for up to three factors that best describe the contributions to the injury. If no factors were involved, check or mark the None box.

Example

K

The casualty was injured because the exits were blocked by fire (21) and his clothing caught fire (35) while he was trying to escape:



FACTORS CONTRIBUTING TO INJURY CODES

Egress Problem

- 11 Crowd situation, limited exits.
- Mechanical obstacles to exit. Includes items blocking exit.
- 13 Locked exit or other problem with exit.
- 14 Problem with quick-release burglar or security bar.
- Burglar or security bar, intrusion barrier.
- 16 Window type or size impeded egress.
- 10 Egress problem, other.

Fire Pattern

- 21 Exits blocked by flame.
- 22 Exits blocked by smoke.
- Vision blocked or impaired by smoke.
- 24 Trapped above fire.
- 25 Trapped below fire.
- Fire pattern, other.

Escape

- 31 Unfamiliar with exits.
- 32 Excessive travel distance to nearest clear exit.
- 33 Chose inappropriate exit route.
- 34 Re-entered building.
- 35 Clothing caught fire while escaping. Excludes clothing on a person intimately involved with ignition (91).
- 30 Escape, other.

Collapse

- 40 Collapse, other.
- 41 Roof collapse.
- 42 Wall collapse.
- 43 Floor collapse.

Vehicle-Related Factors



- 51 Trapped in/by vehicle.
- 52 Vehicle collision, rollover.
- 50 Vehicle-related, other.

Equipment-Related Factors

- 61 Unvented heating equipment.
- 62 Improper use of heating equipment.
- 63 Improper use of cooking equipment.
- 60 Equipment-related factors, other.

Other Special Factors

- Clothing burned, not while escaping. Includes clothing on a person intimately involved with ignition. Excludes clothing that caught fire while escaping (35).
- 92 Overexertion.
- 00 Factor contributing to injury, other.
- NN None.

SECTION L

Activity When Injured

Activity When Injured was known as Activity at Time of Injury in NFIRS 4.1.

Definition

The action or activity in which the person was engaged at the time of the injury.

Purpose

This element identifies the situations when people are injured most frequently so that public education programs can be targeted at reducing fire injuries.

Entry

Check or mark the box that best describes the activity of the casualty when injured.

Example

A person was injured while trying to control the fire (3):



M

ACTIVITY WHEN INJURED CODES

- 1 Escaping.
- 2 Rescue attempt.
- 3 Fire control.
- 4 Returning to vicinity of fire before control of fire. Excludes rescue attempt (2).
- 5 Returning to vicinity of fire after control of fire. Includes cleanup and salvage.
- 6 Sleeping.
- 7 Unable to act.
- 8 Irrational act.
- 0 Activity, other.
- U Undetermined.

SECTION M

This section captures the relationship between the location of a casualty at the time of the incident, location of the origin of the fire, and whether the casualty was intimately involved with the ignition of the fire.

™ Location at Time of Incident

Definition

The location of the casualty in relationship to the area of fire origin at the time the fire started.

Purpose

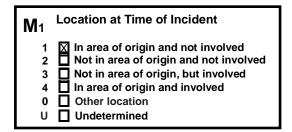
This element provides specific information on how the injury occurred. This can be helpful in directing public education efforts and injury prevention.

Entry

Check or mark the box that best describes the location of the casualty in relation to the area of fire origin and whether the casualty was involved with the ignition at the time the fire started.

Example

The casualty was in the area of the fire origin and was not involved in the ignition of the fire (1):



LOCATION AT TIME OF INCIDENT CODES

- 1 In area of origin and not involved in starting the fire.
- Not in area of origin and not involved in starting the fire.
- Not in area of origin, but involved in starting the fire.
- 4 In area of ignition and involved in starting the fire.
- 0 Other location.
- U Undetermined.

General Location at Time of Injury

Definition

The general location of the casualty in relationship to the area of fire origin at the time the injury was sustained.

Purpose

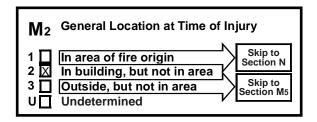
This element provides more information on how the injury occurred and the relationship of the ignition to the casualty location at time of injury and at the time of ignition.

Entry

Check or mark the box that best describes the casualty's general location at the time of injury. If Code "1" or "U" is marked, skip to Section N. If Code "3" is marked, skip to Block M5. If the general location is undetermined, leave this block blank and skip to Section N.

Example

The casualty was in the building, but not in the area of origin (2):



GENERAL LOCATION AT TIME OF INJURY CODES

- 1 In area of fire origin, whether that is inside or outside a building.
- 2 In building of origin, but not in area of origin.
- 3 Outside, but not in area of origin.
- U Undetermined.



™ Story at Start of Incident

Definition

Identifies the story where the casualty was located at the start of the incident.

Purpose

Providing information on the physical separation between the person injured and the area of origin at the start of the fire can be helpful in assessing the adequacy of exits.

Entry

If the injury occurred inside a structure, enter the story where the casualty was located at the start of the incident. If the story is below grade, check or mark the Below Grade box.

- For split grades, consider the main egress point as the first story.
- Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example

The casualty was on the fifth story at the start of the incident:



Story Where Injury Occurred

Definition

Identifies the story where the casualty was located when the injury occurred.

Purpose

This element provides more information on how far the casualty was from the area of origin when the injury occurred. This can be helpful in assessing the adequacy of detection, alarm, and exit systems as well as assisting in code enforcement.

Entry

If the injury occurred in a structure and the person was on a story different from that in Block M3, enter the story where the injury occurred. If the story is below grade, check or mark the Below Grade box.

Example

The injury occurred on the third story:



™ Specific Location at Time of Injury

• Specific Location at Time of Injury was known as Area of Fire Origin in NFIRS 4.1.

Definition

Identifies the specific location of the casualty at the time of the injury.

Purpose

This element provides more information on how the injury occurred.

Entry

If the injury did not occur in the area of fire origin, enter the two-digit code and description that best describes the specific location or area where the casualty was located when injured.

Example

The casualty occurred in the maintenance shop of the factory (65):



An alphabetized synonym list for Specific Location at Time of Injury Codes is presented in Appendix B.

SPECIFIC LOCATION AT TIME OF INJURY CODES

Means of Egress

- 01 Hallway corridor, mall.
- 02 Exterior stairway. Includes fire escapes, exterior ramps.
- 03 Interior stairway or ramp. Includes interior ramps.
- 04 Escalator: exterior, interior.
- 05 Entranceway, lobby.
- 09 Egress/Exit, other.

Assembly or Sales Areas (Groups of People)

- Arena, assembly area with fixed seats for 100 or more people. Includes auditoriums, chapels, places of worship, classrooms, lecture halls, arenas, theaters.
- Assembly area without fixed seats for 100 or more people. Includes ballrooms, bowling alleys, gymnasiums, multiuse areas, roller or ice skating rinks.
- Assembly area without fixed seats for less than 100 people. Includes meeting rooms, classrooms, multiuse areas.
- 14 Common room, den, family room, living room, lounge, music room, recreation room, sitting room.
- Sales area, showroom. Excludes display windows (56).
- 16 Art gallery, exhibit hall, library.
- 17 Swimming pool.
- 10 Assembly or sales areas, other.

M

Function Areas

- 21 Bedroom for less than five people. Includes jail or prison cells, lockups, patient rooms, sleeping areas.
- Bedroom for more than five people. Includes barracks, dormitories, patient wards.
- Bar area, beverage service area, cafeteria, canteen area, dining room, lunchroom, mess hall.
- 24 Cooking area, kitchen.
- 25 Bathroom, checkroom, lavatory, locker room, powder room, outhouse, portable toilet, sauna area.
- Laundry area, wash house (laundry).
- 27 Office.
- 28 Personal service area. Includes barber/beauty salon area, exercise/health club, massage area.
- Function areas, other.

Technical Processing Areas

- 31 Laboratory.
- 32 Dark room, photography area, printing area.
- Treatment: first-aid area, surgery area (minor procedures).
- 34 Surgery area: major operations, operating room or theater, recovery room.
- Computer room, control room or center, data processing center, electronic equipment area, telephone booth or area, radar room.
- 36 Stage area: performance, basketball court, boxing ring, dressing room (backstage), ice rink.
- 37 Projection room, spotlight area, stage light area.
- Processing/Manufacturing area, workroom, assembly area.
- 30 Technical processing areas, other.

Storage Areas

- Storage room, area, tank, bin. Includes all areas where products are held awaiting process, shipment, use, sale.
- 42 Closet
- 43 Storage: supplies or tools. Includes dead storage, maintenance supply room, tool room, basement (unfinished).
- 44 Records storage room, storage vault.
- Shipping/Receiving area: loading area, dock or bay, mail room, packing area.
- Chute/Container: trash, rubbish, waste. Includes compactor and garbage areas. Excludes incinerators (64).
- 47 Vehicle storage area: garage, carport.
- 40 Storage areas, other.

Service Areas

- 51 Dumbwaiter or elevator shaft.
- 52 Conduit, pipe, utility, or ventilation shaft.
- 53 Light shaft.
- 54 Chute. Includes laundry or mail chutes. Excludes trash chutes (46).
- 55 Duct. Includes HVAC, cable, exhaust.
- 56 Display window.
- 58 Conveyor.
- 50 Service areas, other.

Service or Equipment Areas

- Machinery room or area. Includes elevator machinery room, engine room, head house, pump room, refrigeration room.
- Heating room or area, water heater area.
- 63 Switchgear area, transformer vault.
- 64 Incinerator area.
- 65 Maintenance shop or area. Includes paint shop, repair shop, welding area, workshop.
- 66 Cell, test.

- 67 Enclosure, pressurized air.
- Enclosure with enriched oxygen atmosphere.
- 60 Service or equipment areas, other.

Structural Areas

- 71 Substructure area or space, crawl space.
- Exterior balcony, unenclosed porch. Excludes enclosed porches (93).
- 73 Ceiling and floor assembly, crawl space between stories.
- 74 Attic: vacant, crawl space above top story. Includes cupola, concealed roof/ceiling space, steeple.
- 75 Wall assembly, concealed wall space.
- 76 Wall surface, exterior.
- 77 Roof surface, exterior.
- 78 Awning.
- 70 Structural areas, other.

Transportation, Vehicle Areas

- Operator/Passenger area of transportation equipment.
- 82 Cargo/Trunk area—all vehicles.
- 83 Engine area, running gear, wheel area.
- 84 Fuel tank, fuel line.
- Separate operator/control area of transportation equipment. Includes bridges of ships, cockpit of planes. Excludes automobiles, trucks, buses (81).
- 86 Exterior, exposed surface.
- 80 Vehicle areas, other.

Outside Areas

- 91 Railroad right-of-way: on or near.
- 92 Highway, parking lot, street: on or near.
- 93 Courtyard, patio, terrace. Includes screened-in porches. Excludes unenclosed porches (72).
- Open area, outside. Includes farmland, fields, lawns, parks, vacant lots.
- 95 Wildland, woods.
- 96 Construction/Renovation area.
- 97 Multiple areas.
- 98 Vacant structural area.
- 90 Outside areas, other.

Other Specific Area of Fire Origin

- 00 Specific area of fire origin, other.
- UU Undetermined.

SECTION N

Primary Apparent Symptom

Definition

The casualty's most serious apparent injury.

Purpose

Knowing the types of injuries caused by fire incidents allows analyses of the frequency and nature of injuries at different types of fires. This aids in creating correct and effective public prevention messages and in determining and improving the emergency responders' equipment and training.

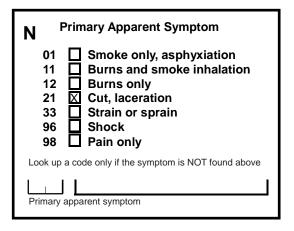


Entry

Seven of the most common symptoms are listed on the paper form. Check or mark the box that best describes the casualty's most apparent serious injury. If the symptom is not listed on the paper form, enter the two-digit code and description that best describes the primary apparent symptom.

Example

The casualty received a cut (21) to the forearm:



PRIMARY APPARENT SYMPTOM CODES

- 01 Smoke inhalation.
- 02 Hazardous fumes inhalation.
- 03 Breathing difficulty or shortness of breath.
- 11 Burns and smoke inhalation.
- Burns only, thermal.
- 13 Burn, scald.
- 14 Burn, chemical.
- 15 Burn, electric.
- 21 Cut or laceration.
- 22 Stab or puncture wound: penetrating.
- Gunshot wound, projectile wound.
- 24 Contusion/Bruise, minor trauma.
- Abrasion.
- 31 Dislocation.
- 32 Fracture.
- 33 Strain or sprain.
- 34 Swelling.
- 35 Crushing.
- 36 Amputation.
- 41 Cardiac symptoms.
- 42 Cardiac arrest.
- 43 Stroke.
- 44 Respiratory arrest.
- 51 Chills.
- 52 Fever.
- 53 Nausea.

- 54 Vomiting.
- Numbness or tingling, paresthesia.
- 56 Paralysis.
- 57 Frostbite.
- 50 Sickness, other.
- 61 Miscarriage.
- Eye trauma, avulsion.
- 64 Drowning.
- 65 Foreign body obstruction.
- 66 Electric shock.
- 67 Poison.
- 71 Convulsion or seizure.
- 72 Internal trauma.
- 73 Hemorrhaging, bleeding internally.
- 81 Disorientation.
- 82 Dizziness/Fainting/Weakness.
- 83 Exhaustion/Fatigue. Includes heat exhaustion.
- 84 Heat stroke.
- 85 Dehydration.
- 91 Allergic reaction. Includes anaphylactic shock and hypersensitivity to medication.
- 92 Drug overdose.
- 93 Alcohol impairment.
- 94 Emotional/Psychological stress.
- 95 Mental disorder.
- 96 Shock.
- 97 Unconscious.
- 98 Pain only.
- 00 Primary apparent symptom, other.
- UU Undetermined.

SECTION 0

Primary Area of Body Injured

Definition

The part of the body that sustained the most serious injury.

Purpose

An analysis of the data from Sections L, N, and O will assist in planning for the emergency treatment of injuries and for injury prevention.

Entry

Check or mark the box that best describes the area of the body that was most seriously injured. It should be the same part of the body affected by the Primary Apparent Symptom (Section N).

P

Example

The casualty's shoulder (2) was dislocated while escaping the burning building:

0	Primary Area of Body Injured
1	☐ Head
2	Neck and shoulder
3	☐ Thorax
4	☐ Abdomen
5	☐ Spine
6	☐ Upper extremities
7	☐ Lower extremities
8	☐ Internal
9	■ Multiple body parts

PRIMARY AREA OF BODY INJURED CODES

- 1 Head.
- 2 Neck or shoulder.
- Thorax. Includes chest and back. Excludes spine (5).
- 4 Abdomen.
- 5 Spine. Excludes back (3).
- 6 Upper extremities. Includes arms and hands.
- 7 Lower extremities. Includes legs and feet.
- 8 Internal.
- 9 Multiple body parts.

SECTION P

Disposition

Definition

Stipulates whether the casualty was taken to an emergency care facility.

Purpose

This information assists in determining the personnel and equipment requirements for handling civilian fire casualties.

Entry

Check or mark the box if the casualty was transported to an emergency care facility by the fire department, other emergency medical service provider, or any other means.



Example

The patient was transported to the hospital by the fire department:

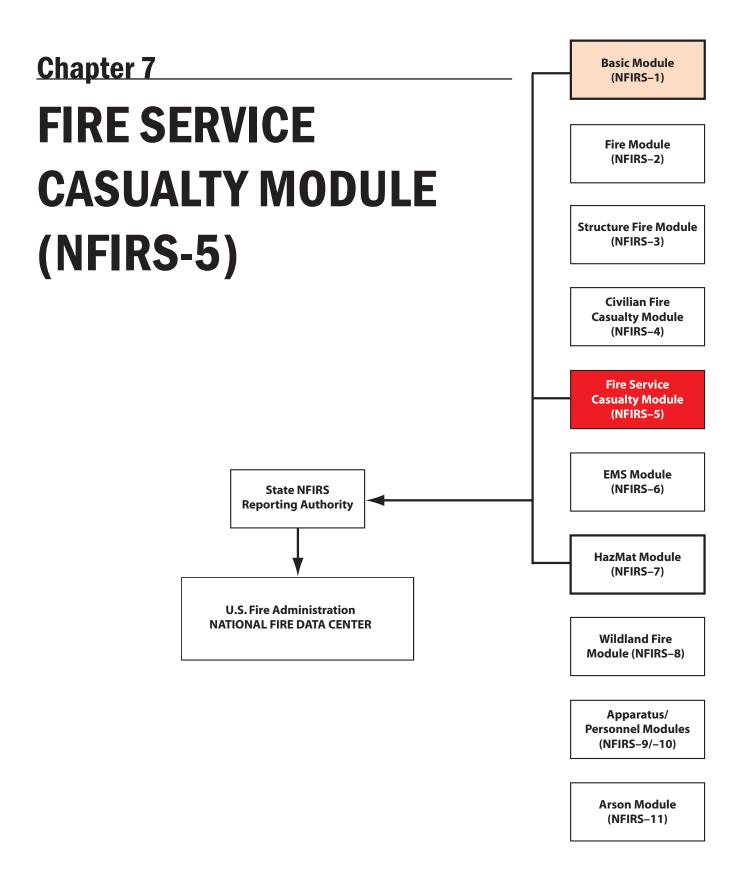
P Disposition

☑ Transported to emergency care facility

Remarks

The Remarks section is an area for any other remarks that might be made concerning the incident. A narrative description of the incident may be written in this block.

Remarks	Local option
-	



A		MM DD YYYY Lident Date	Station Incident No	umber 🛣 Exposure	☐ Delete NFIRS-5 Fire Service Casualty	
B	Injured Person	Identification Number Last Name	1		Casualty Number	
D	Age or Date of Birth Age Age Date of In years Date of Month	Birth Day Day Year	Date and Time Date of Injury Month Day Ye	Time of Injury	Number of prior responses	
G1 1 2 3 4 5 6 7 8 0	Usual Assignment Suppression EMS Prevention Training Maintenance Communications Administration Fire investigation Other	1 Rested 2 Fatigued 4 Ill or injured Severity	ne)	5 Morgue 6 Reside 7 Station 0 Other	's office e/Funeral home nce or quarters Fime of Injury	
	H1 Primary Apparent Symptom 1					
	Primary apparent symptom Primary Part of Body Injured	I None	Cause of injury Factor Contributing	to Injury □None	in Injury	

K 1	Did protective equipment fail and contribute to the injury? Please complete the remainder of this form ONLY if you answer YES.			Ye: No		′ 🗆 • 🗆	Equipment Sequence Number	لىنا	NFIRS-5 Fire Service Casualty
K ₂	K ₂ Protective Equipment Item			K ₃ Protective Equipment Problem					
Head	d or Face Protection	Coat, Sh	hirt, or Trousers	Check one box to indicate the main problem that occurred. 11 Burned				that occurred.	
11 12	☐ Helmet ☐ Full face protector	21 22	Protective coat Protective trousers	12	_	Melte			
13 14	☐ Partial face protector☐ Goggles/eye protection	23 24	☐ Uniform shirt ☐ Uniform T-shirt ☐ Uniform trousers ☐ Uniform coat or jacket	21		Fract	tured, cracked	d or broken	
15 16	Hood Ear protector	25 🔲 26 🗆		22		Punc	tured		
17	Neck protector	27	Coveralls	23		Scrat	tched		
10	∐ Other	20	28			Knoc	ked off		
	ts or Shoes			25		Cut	or ripped		
31 32	☐ Knee length boots with steel☐ Knee length boots with steel☐	toes only	у	31		Trap	ped steam or	hazardous	gas
33 34	☐ 3/4 length boots with steel ba☐ 3/4 length boots with steel to		and steel toes	32		Insuf	ficient insula	tion	
35 36	☐ Boots without steel baseplate ☐ Safety shoes with steel base	e and ste		33		Obje	ct fell in or or	nto equipm	ent item
37	☐ Safety shoes with steel toes	•	Steer toes	41		Faile	d under impa	ct	
38 30	☐ Non-safety shoes ☐ Other			42	_		piece or hose		
Res	piratory Protection			43	_		Ilation valve i		or damaged
41 42	☐ SCBA (demand) open circuit☐ SCBA (positive pressure) open		t	44			ess detached	•	-
43	43 SCBA closed circuit 44 Not self-contained 45 Cartridge respirator			45	_		lator failed to	-	
45				46			ılator damage	-	n t
46 40	<u> </u>			47	_		lem with adm	•	
Hand Protection								ve	
51 52	Firefighter gloves with wristle			48			n failed to op		
52 53	Firefighter gloves without wr Work gloves	istlets		49	_		n damaged by		
54 55	☐ HazMat gloves ☐ Medical gloves			51			oly cylinder or		·
50	Other			52	_	•		•	ed by contact
Spe	cial Equipment			53		Supp	oly cylinder—	insufficient	air/oxygen
61 62	☐ Proximity suit for entry ☐ Proximity suit for non-entry			94		Did n	ot fit properly	y	
63	☐ Totally encapsulated, reusab			95		Not p	properly servi	ced or stor	ed prior to use
64 65	☐ Totally encapsulated, dispos ☐ Partially encapsulated, reusa	able chen	nical suit	96		Not u	ısed for desig	ned purpo	se
66 67	66 Partially encapsulated, disposable chemical suit			97		Not u	ısed as recon	nmended b	y manufacturer
68	68 Flight or jump suit			00		Othe	r equipment į	oroblem	
71	69 Brush suit 71 Exposure suit			υυ		Unde	etermined		
72 73				K ₄				cturer, Mod	lel and Serial
74 75	Life belt or ladder belt	(DACC)	Was the failure of more	1 1.7	ľ	Numb	er		
76	☐ Personal alert safety system ☐ Radio distress device	(PA33)	than one item of protective equipment a factor in the			M	lanufacturer		
77 78	7 Personal lighting injury? If so, complete an				L	lodel			
79 70	79 Vehicle safety belt form for each piece of					L	1 1 1 1	1 1 1	
00	☐ Special equipment, other ☐ Protective equipment, other		failed equipment.			S	erial Number	NFIRS	-5 Revision 05/01/03

A

CHAPTER 7 • FIRE SERVICE CASUALTY MODULE (NFIRS-5)

The Fire Service Casualty Module is used to report all injuries, deaths, or exposures to fire service personnel. This includes casualties that occur in conjunction both with incident responses and with non-incident events such as station duties or training.

• Important: In the event of a non-incident casualty, it is critical that an EMS incident report is created in the system and that it is treated as if the same department with the injury responded to the EMS.

A health exposure occurs when fire service personnel come in contact with a toxic substance or harmful physical agent through any route of entry into the body (e.g., inhalation, ingestion, skin absorption, direct contact). These exposures can be reported regardless of the presence of clinical signs and symptoms. *An exposure fire,* which is captured in Section *A* of the Basic Module, is not the same as a health exposure to personnel.

A separate Fire Service Casualty Module is required for each casualty or health exposure.

SECTION A

The guidance and directions for completing Section A of the Fire Service Casualty Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Fire Service Casualty Module must be identical with the entries on the corresponding Basic Module. If injuries occur in an exposure fire, the casualty report should have the same entries as those from Section A of the Basic Module for that exposure fire. An example of a completed Section A can be found on page 3–8.

Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date A

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🏠

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number

Entry

If the casualty resulted from an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition

Indicates a change to information submitted on a previous Fire Service Casualty Module or a deletion of all information regarding the casualty.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this fire service casualty and now want to have the data on this casualty deleted from the database. If this box is marked, complete Section A, the Casualty Number originally assigned (Section C), and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Injured Person

Name

Definition

The first name, middle initial, and last name that identifies the fire service casualty.

Purpose

The name of the casualty may be required for legal or insurance purposes, filing disability claims, and tracking injuries and health exposures by the individual fire department

В

Entry

Enter the full name of the person. Names should be clearly printed or typed.

Example

The casualty's name is Jeff R. MacFadyen. (See example at Affiliation.)

Identification Number

Definition

The identification or employee number of the fire service casualty. This number is often the individual's social security number, but it may be any combination of letters or numbers up to nine characters in length.

Purpose

The identification number uniquely identifies each fire service casualty.

Entry

Enter the casualty's identification number in the spaces provided. This field is left-justified.

Example

The firefighter's identification number is A23–4556–6789. (See example at Affiliation).

Gender ☆

Definition

The identification of the fire service casualty as male or female.

Purpose

Combined with other field information, this data element assists in the identification of each firefighter injury.

Entry

Check or mark the appropriate gender of the fire service casualty.

Example

The firefighter is male (1). (See example at Affiliation.)

GENDER CODES

- 1 Male.
- 2 Female.

Affiliation

Definition

The identification of the fire service casualty as a volunteer (includes paid on-call) or career firefighter at the time of injury.

Purpose

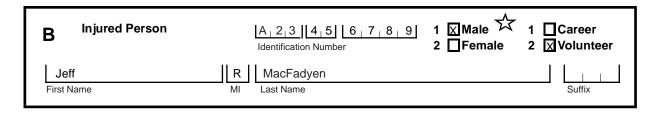
This data element contributes to the identification of the fire service casualty and helps track injury trends and patterns of volunteer vs. career personnel.

Entry

Check or mark the box that best describes the affiliation of the fire service casualty.

Example

The casualty is a volunteer firefighter (2):



AFFILIATION CODES

- 1 Career.
- 2 Volunteer. Includes paid on-call firefighter.

SECTION C

Casualty Number

Definition

A unique number is assigned to each fire service casualty occurring at a single incident or resulting from an incident.

Purpose

The casualty number of the firefighter identifies each fire service casualty separately in the casualty file. Data and information concerning the casualty can be accessed using this number in conjunction with other unique field information.

Entry

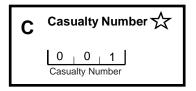
Enter the firefighter casualty number assigned to this casualty. A separate Casualty Number is assigned to each fire service casualty. The first casualty is always coded "001," and each succeeding casualty is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.

Example

Three firefighters were injured at a warehouse fire on 32nd street; the first firefighter injured is assigned the casualty number of 001:

Example on next page





SECTION D

■ Age or Date of Birth ☆

Enter either the fire service casualty's age or the casualty's date of birth. Do not enter both.

Age ☆

Definition

The fire service casualty's age in years.

Purpose

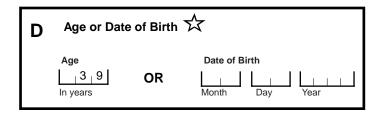
The age of the fire service casualty provides an indication of fire loss. Age can also be used to indicate type, severity, and cause of injury to identify trends and patterns that might be helpful in preventing future fire-fighter injuries and deaths.

Entry

Enter the age of the firefighter.

Example

The injured firefighter is 39 years old:



Date of Birth ☆

Definition

The month, day, and year of birth of the fire service casualty.

Purpose

This data element is an alternative entry for Age. It can provide an indication of fire loss, and can be used to indicate type, severity, and cause of injury to identify trends and patterns that might be helpful in preventing future firefighter injuries and deaths.

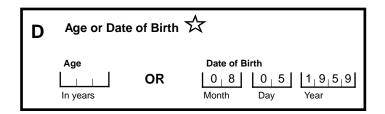
This data element is used as an alternate method for calculating the casualty's age. Age is collected in NFIRS but Date of Birth is not.

Entry

Enter the date of birth showing the month, day, and year (mm/dd/yyyy).

Example

The fire service casualty was born on August 5, 1959:



SECTION E

Date and Time of Injury ☆ Date ☆

Entry

If the injury date is the same as the Incident Date in Section A, enter the same date as the Alarm date entry in Block E1 of the Basic Module. If different, enter the appropriate month, day, and year (mm/dd/yyyy). (See example at Time.)

Time ☆

Definition

The time of day, using the 24-hour clock, when the injury occurred. Midnight is 0000 and signifies the start of a new day.

Purpose

This information is sometimes needed for legal or insurance purposes. In addition, it may be used to analyze when firefighter injuries occur during the course of a fire and during fire suppression activities.

Entry

Enter as closely as possible the time when the injury occurred using the 24-hour clock (i.e., 0000–2359).

Example

A firefighter received a burn on his back and hip at 5:36 a.m. on July 26, 2001:

Example on next page





SECTION F

Responses

Definition

The number of incidents the firefighter responded to in the 24-hour period prior to the time of injury.

Purpose

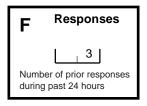
The number of incidences that a firefighter responds to in a short period of time, when analyzed with the other casualty data, can be a useful indicator for identifying possible reasons for the injury or death. This is useful in determining cases of fatigue and cumulative exposure to heat and gases, which may have contributed to the injury.

Entry

Enter the number of incidents responded to by the firefighter in the immediate 24-hour period prior to the time of injury. Do not count the incident at which the injury occurred.

Example

The fire service casualty had been on three other calls prior to the injury.



SECTION G

This section collects information pertaining to the injured firefighter's assignment, physical condition before the injury, the severity of the injury, where the injury was treated, and the activity being performed when injured.

Usual Assignment

Usual Assignment was known as Assignment in NFIRS 4.1.

Definition

This element describes the official assignment of the fire service casualty. This may not coincide with the firefighter's activity at the time of injury (Block G5).

Purpose

When analyzed with the other firefighter casualty data, the duty to which the firefighter was assigned can be used to identify possible reasons for injury or death.

Entry

Check or mark the box that best describes the primary duty assignment of the injured firefighter.

Example

The injured firefighter is normally assigned to the training division (4):



USUAL ASSIGNMENT CODES

- 1 Fire suppression. Includes HazMat, rescue, incident command, and safety.
- EMS.
- 3 Prevention or inspection.
- 4 Training.
- 5 Maintenance.
- 6 Communications. Includes fire alarm.
- 7 Administration.
- 8 Fire investigation.
- 0 Other assignment.

Physical Condition Just Prior to Injury

Physical Condition Just Prior to Injury was known as Physical Condition at Time of Injury in NFIRS 4.1.

Definition

The general physical condition of the firefighter prior to injury.

Purpose

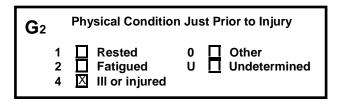
The condition of the firefighter at the time of injury is important in determining and understanding how and why the injuries occurred.

Entry

Check or mark the box that best describes the physical condition of the firefighter at the time of injury.

Example

A firefighter was injured while under treatment for a cold (4):



PHYSICAL CONDITION JUST PRIOR TO INJURY CODES

- 1 Rested.
- 2 Fatigued.
- 4 Ill or injured.
- 0 Physical condition, other.
- U Undetermined.

Severity ☆

Definition

The relative severity or seriousness of the injury based on a scale ranging from "no time lost from work" to "death."

Purpose

An indication of severity can be used as a measure for prevention programs aimed at reducing injuries and deaths. At the local level, this element can be used to track lost-time injuries.

Entry

Check or mark the box that best describes the severity of the casualty.

Example

The injured firefighter would not be able to go to work the next day because of his injury (4):

A health exposure occurs when fire service personnel are exposed to a toxic substance or harmful physi-



cal agent through any route of entry into the body (e.g., inhalation, ingestion, skin absorption, direct contact). These exposures can be reported regardless of the presence of clinical signs and symptoms. Exposures are treated as "report only" (1).

SEVERITY CODES

- 1 Report only. Includes exposures to toxic substances or harmful physical agents through any route of entry into the body (e.g. inhalation, ingestion, skin absorption, direct contact).
- 2 First aid only.
- 3 Treated by physician, not a lost-time injury.
- 4 Moderate severity, lost-time injury. There is little danger of death or permanent disability.
- 5 Severe, lost-time injury. The situation is potentially life threatening if the condition remains uncontrolled.
- 6 Life threatening, lost-time injury. Death is imminent; body processes and vital signs are not normal.
- 7 Death.

Taken To

■ Taken To was known as Patient Taken To in NFIRS 4.1.

Definition

Identifies where the fire service casualty was taken after the injury occurred.

Purpose

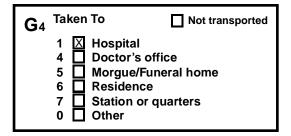
This information is useful in determining the personnel and equipment requirements for handling fire service casualties.

Entry

Check or mark the box that best describes where the fire service casualty was taken, regardless of who transported the firefighter. If the firefighter was not transported, check or mark the Not Transported box.

Example

An injured firefighter was taken to the hospital (1):



TAKEN TO CODES

- 1 Hospital.
- 4 Doctor's office, non-emergency health care facility.
- 5 Morgue or funeral home.
- 6 Residence (firefighter's home).
- 7 Station or quarters.
- 0 Taken to, other.
- N Not transported.

Activity at Time of Injury

Activity at Time of Injury was known as Firefighter Activity in NFIRS 4.1.

Definition

The activity being performed by the firefighter at the time the injury occurred.

Purpose

The activity at the time of injury is a prime factor in determining the cause of the injury and developing methods to minimize the hazards involved with that activity.

Entry

Enter the two-digit code and description of the activity of the casualty when injured.

Example

A firefighter was injured using power tools to ventilate the roof (42):



ACTIVITY AT TIME OF INJURY CODES

Driving or Riding Vehicle

- 11 Boarding fire department vehicle.
- 12 Driving fire department vehicle.
- 13 Tillering fire department vehicle.
- 14 Riding fire department vehicle.
- 15 Exiting fire department vehicle.
- Driving/Riding non-fire department vehicle.
- Boarding/Exiting non-fire department vehicle.
- 10 Driving or riding vehicle, other.

Operating Fire Department Apparatus

- 21 Operating engine or pumper.
- Operating aerial ladder or elevating platform.
- 23 Operating EMS vehicle.
- 24 Operating HazMat vehicle.
- 25 Operating rescue vehicle.
- 20 Operating fire department apparatus, other.

Extinguishing Fire or Neutralizing Incident

- 31 Handling charged hoselines.
- 32 Using hand extinguishers.
- 33 Operating master steam device.
- 34 Using handtools in extinguishment activity.
- 35 Removing power lines.
- 36 Removing flammable liquids/chemicals.
- 37 Shutting off utilities, gas lines, etc.
- 30 Extinguishing fire/neutralizing incident, other.

Suppression Support

- 41 Forcible entry.
- 42 Ventilation with power tools.
- 43 Ventilation with hand tools.
- 44 Salvage.
- 45 Overhaul.
- 40 Suppression support, other.

Access or Egress

- 51 Carrying ground ladder.
- 52 Raising ground ladder.
- 53 Lowering ground ladder.
- 54 Climbing ladder.
- 55 Scaling.
- 56 Escaping fire or hazard.
- 57 Moving/Lifting patient with carrying device.
- Moving/Lifting patient without carrying device.
- 50 Access/Egress, other.

EMS or Rescue

- 61 Searching for victim.
- Rescuing fire victim.
- Rescuing non-fire victim.
- Water rescue.
- 65 Providing EMS care.
- 66 Diving operations.
- 67 Extraction with power tools.
- 68 Extraction with hand tools.
- 60 EMS/Rescue, other.

Other Incident Scene Activity

- 71 Directing traffic.
- 72 Catching hydrant.
- 73 Laying hose.
- 74 Moving tools or equipment around scene.

- 75 Picking up tools, equipment, or hose on scene.
- 76 Setting up lighting. Includes portable generator operations.
- 77 Operating portable pump.
- 70 Other incident scene activity, other.

Station Activity

- 81 Moving about station, alarm sounding.
- 82 Moving about station, normal activity.
- 83 Station maintenance.
- 84 Vehicle maintenance.
- 85 Equipment maintenance.
- Physical fitness activity, supervised.
- Physical fitness activity, unsupervised.
- 88 Training activity or drill.
- 80 Station activity, other.

Other Activity

- 91 Incident investigation, during incident.
- 92 Incident investigation, after incident.
- 93 Inspection activity.
- 94 Administrative work.
- 95 Communications work.
- 00 Activity at time of injury, other.
- UU Undetermined.

SECTION H

This section focuses on the injury itself—the symptom that appears to be the most serious and the part of the body that has been injured.

Primary Apparent Symptom

Definition

The firefighter's most serious apparent injury.

Purpose

This entry, in conjunction with other related entries, can improve the understanding of the nature and cause of firefighter casualties and can aid in improving firefighter equipment and training needs. For example, large numbers of smoke inhalation injuries to firefighters would indicate a need to reevaluate the uses or adequacy of breathing apparatus.

Entry

Enter the two-digit code and description of the casualty's that appears to be the most serious.

Example

A firefighter is overcome by smoke (01):



PRIMARY APPARENT SYMPTOM CODES

- 01 Smoke inhalation.
- 02 Hazardous fumes inhalation.
- 03 Breathing difficulty or shortness of breath.
- 11 Burns and smoke inhalation.
- Burns only, thermal.
- 13 Burn, scald.
- 14 Burn, chemical.
- 15 Burn, electric.
- 21 Cut or laceration.
- 22 Stab or puncture wound: penetrating.
- 23 Gunshot wound, projectile wound.
- 24 Contusion/Bruise, minor trauma.
- 25 Abrasion.
- 31 Dislocation.
- 32 Fracture.
- 33 Strain or sprain.
- 34 Swelling.
- 35 Crushing.
- 36 Amputation.
- 41 Cardiac symptoms.
- 42 Cardiac arrest.
- 43 Stroke.
- 44 Respiratory arrest.
- 51 Chills.
- 52 Fever.
- 53 Nausea.
- 54 Vomiting.
- Numbness or tingling, paresthesia.
- 56 Paralysis.
- 57 Frostbite.
- 50 Sickness, other.
- 61 Miscarriage.
- Eye trauma, avulsion.
- 64 Drowning.
- 65 Foreign body obstruction.
- 66 Electric shock.
- 67 Poison.
- 71 Convulsion or seizure.
- 72 Internal trauma.
- 73 Hemorrhaging, bleeding internally.
- 81 Disorientation.
- 82 Dizziness/Fainting/Weakness.
- 83 Exhaustion/Fatigue. Includes heat exhaustion.
- 84 Heat stroke.
- 85 Dehydration.
- Allergic reaction. Includes anaphylactic shock and hypersensitivity to medication.
- 92 Drug overdose.
- 93 Alcohol impairment.
- 94 Emotional/Psychological stress.
- 95 Mental disorder.
- 96 Shock.
- 97 Unconscious.
- 98 Pain only.
- 00 Primary apparent symptom, other.
- UU Undetermined.

Н

Primary Part of Body Injured

Definition

The body part or area that was affected or sustained the most serious injury.

Purpose

An analysis of the data from Blocks G5, H1, and H2 will assist in the development of protective clothing, equipment, safe operating procedures, and safety training.

Entry

Enter the two-digit code and description of the part of the body that was most seriously injured. It should be the same part of the body affected by the Primary Apparent Symptom. If no body part was injured, check or mark the None box.

Example

A firefighter was overcome by smoke (81):



PRIMARY PART OF BODY INJURED CODES

Head

- 11 Ear.
- 12 Eye.
- 13 Nose.
- 14 Mouth. Includes lips, teeth, and interior.
- 10 Head, other.

Neck and Shoulders

- 21 Neck.
- 22 Throat.
- 23 Shoulder.

Thorax

- 31 Back. Excludes spine (51).
- 32 Chest.

Abdominal Area

- 41 Abdomen.
- 42 Pelvis or groin.
- 43 Hip, lower back, or buttocks.

Spine

51 Spine. Excludes back (31).

Upper Extremities

- Arm, upper. Excludes elbows (63) and shoulders (23).
- Arm, lower. Excludes elbows (63) and wrists (64).
- 63 Elbow.
- 64 Wrist.
- 65 Hand and fingers.

Lower Extremities

- 71 Leg, upper. Excludes knees (73).
- Leg, lower. Excludes knees (73), ankles (74), and foot and toes (75).
- 73 Knee.
- 74 Ankle.
- 75 Foot and toes.

Internal

- 81 Trachea and lungs.
- 82 Heart.
- 83 Stomach.
- 84 Intestinal tract.
- 85 Genito-urinary.
- 80 Internal, other.

Multiple Parts

- 91 Multiple body parts, upper body.
- 92 Multiple body parts, lower body.
- 93 Multiple body parts, whole body.

Other Body Parts

- 00 Part of body injured, other.
- NN None.
- UU Undetermined.

SECTION I

This section collects information on the cause and factor that contributed to the firefighter's injury and whether an object was involved.

Cause of Firefighter Injury

Definition

The action or lack of action that directly resulted in the injury.

Purpose

An analysis of this information may permit an understanding of the condition causing the injury and a means of planning suitable preventive techniques. For example, firefighter injuries resulting from a blow to the head may indicate inadequacies in helmet design.

Entry

Enter the code and a written description for the immediate cause or condition responsible for the injury.

Example

A firefighter receives burns (4) on the forearm:



CAUSE OF FIREFIGHTER INJURY CODES

- 1 Fall.
- 2 Jump.
- 3 Slip/Trip.
- 4 Exposure to hazard. Includes exposure to heat, smoke, or toxic agents.
- 5 Struck or assaulted by person, animal, moving object.
- 6 Contact with object (firefighter moved into or onto object). Includes running into objects, stepping on objects, or grabbing a hot or electrically charged object.
- 7 Overexertion/Strain.
- 0 Cause of injury, other.
- U Undetermined.

Factor Contributing to Injury

▼ Factor Contributing to Injury was a part of Cause of Firefighter Injury in NFIRS 4.1.

Definition

The most significant factor contributing to the injury of the fire service casualty.

Purpose

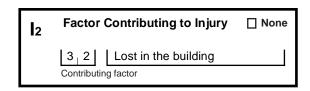
This element provides additional information on how an injury occurred. The analysis of this information may permit an understanding of the events causing the injury and a means of planning suitable preventive techniques.

Entry

Enter the two-digit code and description of the most significant factor contributing to the injury. Check or mark the None box if there was no apparent factor that contributed to the injury.

Example

The firefighter suffered from smoke inhalation after becoming disoriented and lost in the building (32):





FACTOR CONTRIBUTING TO INJURY CODES

Collapse or Falling Object

- 11 Roof collapse.
- 12 Wall collapse.
- 13 Floor collapse.
- 14 Ceiling collapse.
- 15 Stair collapse.
- 16 Falling objects.
- 17 Cave-in (earth).
- 10 Collapse or falling object, other.

Fire Development

- 21 Fire progress. Includes smoky conditions.
- 22 Backdraft.
- 23 Flashover.
- 24 Explosion.
- Fire development, other.

Lost, Caught, Trapped, or Confined

- Person physically caught or trapped. Excludes persons directly injured by a structural collapse or falling object (10 series).
- 32 Lost in building.
- Operating in confined structural areas. Includes attics and crawl spaces.
- 34 Operating under water or ice.
- 30 Lost, caught, trapped, or confined, other.

Holes

- 41 Unguarded hole in structure.
- 42 Hole burned through roof.
- 43 Hole burned through floor.
- 40 Holes, other.

Slippery or Uneven Surfaces

- 51 Icv surface.
- Wet surface. Includes water, soap, foam, lubricating materials, etc.
- 53 Loose material on surface.
- 54 Uneven surface. Includes holes in the ground.
- 50 Slippery or uneven surfaces, other.

Vehicle or Apparatus

- Vehicle left road or overturned.
- 62 Vehicle collided with another vehicle.
- 63 Vehicle collided with nonvehicular object.
- 64 Vehicle stopped too fast.
- 65 Seat belt not fastened.
- Firefighter standing on apparatus.
- 60 Vehicle or apparatus, other.

Other Contributing Factors

- 91 Civil unrest. Includes riots and civil disturbances.
- 92 Hostile acts.
- 00 Factor contributing to injury, other.
- NN None.
- UU Undetermined.

Object Involved in Injury

Definition

The description of the object, if one was involved, that contributed to the injury of the fire service casualty.

Purpose

This field provides additional information on how a casualty occurred. The analysis of this information, in combination with other entries, may permit an understanding of the events causing the injury and a means of planning suitable preventive techniques.

Entry

Enter the two-digit code and description of the object involved in the injury. If no object was involved, check or mark the None box.

Example

The firefighter received a cut on the forearm when a piece of glass dropped from a second-story window (43):



OBJECT INVOLVED IN INJURY CODES

- 11 Coupling.
- 12 Hose, not charged.
- 13 Hose, charged.
- 14 Water from master stream.
- 15 Water from hose line.
- 16 Water, not from a hose.
- 17 Steam.
- 18 Extinguishing agent, not water.
- 21 Ladder, aerial.
- 22 Ladder, ground.
- 23 Tools/Equipment.
- 24 Knife, scissors.
- 25 Syringe.
- Fire department vehicle or apparatus.
- Fire department vehicle door. Includes apparatus compartments.
- 28 Station sliding pole.
- 31 Curb.
- 32 Door in building.
- 33 Fire escape.
- 34 Ledge.
- 35 Stairs.
- Wall. Includes other vertical surfaces such as cliffs.
- 37 Window.
- 38 Roof.

- 39 Floor or ceiling.
- 30 Structural component, other.
- 41 Asbestos.
- 42 Dirt, stones, or debris.
- 43 Glass.
- 45 Nails.
- 46 Splinters.
- 47 Embers.
- 48 Hot tar.
- 49 Hot metal.
- 51 Biological agents.
- 52 Chemicals.
- Fumes, gases, or smoke.
- 54 Poisonous plants.
- 55 Insects.
- 56 Radioactive materials.
- 61 Electricity.
- Extreme weather.
- 63 Utility flames, flares, torches.
- 64 Heat or flame.
- 91 Person: victim.
- 92 Property and structure contents.
- 93 Animal.
- 94 Non-fire department vehicle.
- 95 Gun. Includes all other projectile weapons.
- 90 Person, other.
- 00 Object involved in injury, other.
- NN None.
- UU Undetermined.

SECTION J

This section captures information on the specific location where the firefighter was injured and, if in a vehicle, the type of vehicle involved.

Where Injury Occurred

Definition

The place where the injury occurred. This location may be en route to or from the scene, at the incident scene, at the station, or some other location.

Purpose

In conjunction with other fields, this element can help identify why the firefighter sustained a certain type of injury. It can indicate areas in which safety training and safer operating procedures may be necessary.

Entry

Check or mark the box that best describes where the injury took place.

J

Example

A firefighter was killed en route to a call when the tanker overturned (3):

J₁	Where Injury Occurred
1	En route to FD location At FD location En route to incident scene En route to medical facility At scene in structure At scene outside At medical facility Returning from incident Returning from med facility
0 <u> </u>	Other Undetermined

WHERE INJURY OCCURRED CODES

- 1 En route to fire department location. Includes volunteers responding to the fire station or apparatus traveling between fire department locations.
- 2 At fire department location.
- 3 En route to incident or assignment.
- 4 En route to medical facility.
- 5 At scene, in structure.
- 6 At scene, outside structure.
- 7 At medical facility.
- 8 Returning from incident or assignment.
- 9 Returning from medical facility.
- 0 Where injury occurred, other.
- U Undetermined.

Story Where Injury Occurred

Definition

This element identifies the story where the injury occurred.

Purpose

This entry provides additional information on where the injury occurred, which can help in directing injury prevention efforts. This element, combined with other elements, better describes the accident scene.

Entry

If the injury occurred inside or on a structure, enter the story where the injury occurred. If the story is below grade, check or mark the Below Grade box.

- Complete this block only if the injury occurred inside a structure.
- Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example

The casualty occurred inside the building on the third story:



Specific Location Where Injury Occurred

Definition

This element identifies the specific location of the fire service casualty at the time of injury.

Purpose

This element provides additional information on where the injury occurred. This can be helpful in directing injury prevention efforts.

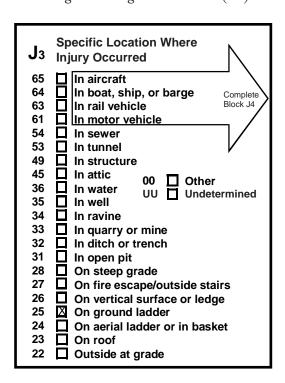
Entry

Check or mark the box that best describes the specific location at time of injury.

• If any code greater than 60 is checked or marked, continue to Block J4.

Example

The firefighter sprained an ankle climbing down a ground ladder (25):



J

SPECIFIC LOCATION WHERE INJURY OCCURRED CODES

- 22 Outside at grade.
- 23 On roof.
- 24 On aerial ladder or in basket.
- 25 On ground ladder.
- 26 On vertical surface or ledge.
- 27 On fire escape or outside stairway.
- 28 On steep grade.
- 31 In open pit.
- 32 In ditch or trench.
- 33 In quarry or mine.
- 34 In ravine.
- 35 In well.
- 36 In water.
- In attic or other confined structural space.
- 49 In structure. Excludes attic, roof, or wall.
- 53 In tunnel.
- 54 In sewer.
- 61 In motor vehicle.
- 63 In rail vehicle.
- 64 In boat, ship, or barge.
- 65 In aircraft.
- 00 Specific location where injury occurred, other.
- UU Undetermined.

Vehicle Type

Definition

Identifies the type of vehicle that the firefighter was in at time of injury.

Purpose

This element provides more information on where and how the injury occurred. This can be helpful in directing injury prevention efforts.

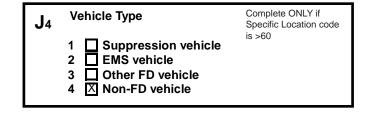
Entry

Check or mark the box that best describes the vehicle type.

Complete this block only if the Specific Location code (Block J3) is greater than 60.

Example

The volunteer firefighter was injured in his personal vehicle on the way to a call:



VEHICLE TYPE CODES

- 1 Suppression vehicle.
- 2 EMS vehicle.
- 3 Other fire department vehicle. Includes passenger vehicles.
- 4 Non-fire department vehicle. Includes private auto.
- N None.

SECTION K

Information on whether firefighter equipment failed and contributed to the injury is collected in this section.

Equipment Sequence Number

Definition

A unique number assigned to each piece of faulty equipment worn or used by the injured firefighter.

Purpose

In conjunction with other field in the section, the sequence number permits each piece of equipment associated with an injury to be identified separately on the casualty file.

Entry

If no equipment failed, check or mark the No box, which completes the entries of this module. If protective equipment failed and it contributed to the injury, check or mark the Yes box and complete the remainder of this section (Blocks K1 through K4). Enter the equipment sequence number. A separate Equipment Sequence Number is assigned to each piece of equipment that failed and contributed to the injury. The first equipment is always coded "001," and each succeeding equipment is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.

A separate form is required for each piece of equipment that failed and contributed to the injury.

Example

The first piece of faulty equipment associated with an injury to a firefighter:

K ₁	Did protective equipment fail and contribute to the injury?	Yes	ΥX	Equipment Sequence .	
	Please complete the remainder of this form ONLY if you answer YES.	No	N 🗌	Number 0 ₁ 0	_1

EQUIPMENT FAILED CODES

Y Yes. N No.

Protective Equipment Item

Protective Equipment Item replaces the five individual equipment lists in NFIRS 4.1

Definition

This block records information about the faulty protective equipment item that was a factor in the fire-fighter's injury.

Purpose

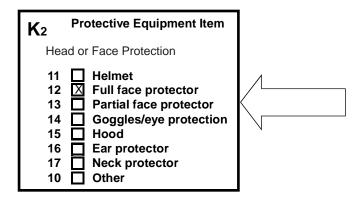
This element provides more information on why the injury occurred and may help detect problems with equipment that could lead to future injuries.

Entry

Check or mark the box that best describes the piece of protective equipment that failed and contributed to the injury.

Example

The firefighter's face piece melted (12) causing burns on the side of his face:



PROTECTIVE EQUIPMENT ITEM CODES

Head or Face Protection

- 11 Helmet.
- 12 Full face protector.
- 13 Partial face protector.
- 14 Goggles/Eye protection.
- 15 Hood.
- 16 Ear protector.
- 17 Neck protector.
- 10 Head or face protection, other.

Coat, Shirt, or Trousers

- 21 Protective coat.
- 22 Protective trousers.
- 23 Uniform shirt.
- 24 Uniform T-shirt.
- 25 Uniform trousers.
- 26 Uniform coat or jacket.
- 27 Coveralls.
- Apron or gown.
- 20 Coat, shirt, or trousers, other.

Boots or Shoes

- 31 Knee-length boots with steel baseplate and steel toes.
- 32 Knee-length boots with steel toes only.
- 33 3/4-length boots with steel baseplate and steel toes.
- 34 3/4-length boots with steel toes only.
- 35 Boots without steel baseplate or steel toes.
- 36 Safety shoes with steel baseplate and steel toes.
- 37 Safety shoes with steel toes only.
- 38 Non-safety shoes.
- 30 Boots or shoes, other.

Respiratory Protection

- Self-contained breathing apparatus (SCBA), demand, open circuit.
- 42 Self-contained breathing apparatus (SCBA), positive pressure, open circuit.
- 43 Self-contained breathing apparatus (SCBA), closed circuit.
- 44 Non-self-contained breathing apparatus.
- 45 Cartridge respirator.
- 46 Dust or particle mask.
- 40 Respiratory protection, other.

Hand Protection

- 51 Firefighter gloves with wristlets.
- 52 Firefighter gloves without wristlets.
- 53 Work gloves.
- 54 HazMat gloves.
- 55 Medical gloves.
- 50 Hand protection, other.

Special Equipment

- 61 Proximity suit for entry.
- 62 Proximity suit for non-entry.
- 63 Totally encapsulated, reusable chemical suit.
- Totally encapsulated, disposable chemical suit.
- Partially encapsulated, reusable chemical suit.
- Partially encapsulated, disposable chemical suit.
- Flash protection suit.
- 68 Flight or jump suit.
- 69 Brush suit.

K

Special Equipment Continued

- 71 Exposure suit.
- 72 Self-contained underwater breathing apparatus (SCUBA).
- 73 Life preserver.
- 74 Life belt or ladder belt.
- 75 Personal alert safety system (PASS).
- 76 Radio distress device.
- 77 Personal lighting.
- 78 Fire shelter or tent.
- 79 Vehicle safety belt.
- 70 Special equipment, other.
- 00 Protective equipment item, other.

Protective Equipment Problem

Protective Equipment Problem replaces the five individual equipment problem lists in NFIRS 4.1

Definition

The most serious problem with the piece of equipment that failed and contributed to the injury.

Purpose

Provides additional information on why the injury occurred and highlights problems with specific equipment.

Entry

Check or mark the box that best describes the protective equipment problem.

Example

The firefighter's face piece melted (12):

Kз	Protective Equipment Problem Check one box to indicate the main problem that occurred
11	☐ Burned
12	X Melted
21	Fractured, cracked or broken
22	Punctured
23	☐ Scratched
24	☐ Knocked off
25	Cut or ripped
31	☐ Trapped steam or hazardous gas
32	Insufficient insulation
33	Object fell in or onto equipment item
41	Failed under impact
42	☐ Face piece or hose detached
43	☐ Exhalation valve inoperative or damaged
44	☐ Harness detached or separated
45	Regulator failed to operate
46	Regulator damaged by contact
47	Problem with admissions valve
48	☐ Alarm failed to operate
49	Alarm damaged by contact
51	Supply cylinder or valve failed to operate
52	Supply cylinder/valve damaged by contact
53	☐ Supply cylinder—insufficient air/oxygen
94	☐ Did not fit properly
95	Not properly serviced or stored prior to use
96	☐ Not used for designed purpose
97	☐ Not used as recommended by manufacturer
00	Other equipment problem
UU	☐ Undetermined

PROTECTIVE EQUIPMENT PROBLEM CODES

- 11 Burned.
- 12 Melted.
- 21 Fractured, cracked, or broke.
- 22 Punctured.
- 23 Scratched.
- 24 Knocked off.
- 25 Cut or ripped.
- 31 Trapped steam or hazardous gas.
- 32 Insufficient insulation.
- 33 Object fell in or onto equipment item.
- 41 Failed under impact.
- Face piece or hose detached.
- 43 Exhalation valve inoperative or damaged.
- 44 Harness detached or separated.
- 45 Regulator failed to operate.
- 46 Regulator damaged by contact.
- 47 Problem with admissions valve.
- 48 Alarm failed to operate.
- 49 Alarm damaged by contact.
- 51 Supply cylinder or valve failed to operate.
- 52 Supply cylinder or valve damaged by contact.
- 53 Supply cylinder contained insufficient air or oxygen.
- 94 Did not fit properly.
- 95 Not properly serviced or stored prior to use.
- 96 Not used for designed purpose.
- 97 Not used as recommended by manufacturer.
- 00 Protective equipment problem, other.
- UU Undetermined.

Equipment Manufacturer, Model, and Serial Number

Definition

This block identifies the specific equipment that failed.

Manufacturer is to the name of the company that made the piece of equipment.

Model is to the manufacturer's model name. If one does not exist, use the equipment's common physical description.

Serial Number is to the manufacturer's serial number that is generally stamped on an identification plate on the equipment. Lot number may also be used here if no serial number is available.

Purpose

These data elements provide detailed information on the specific equipment that failed and contributed to the injury. Data on model and other information are useful in determining the compliance with standards for protective equipment involved in firefighting and for analyzing the effectiveness of these codes, standards, and regulations.



Entry

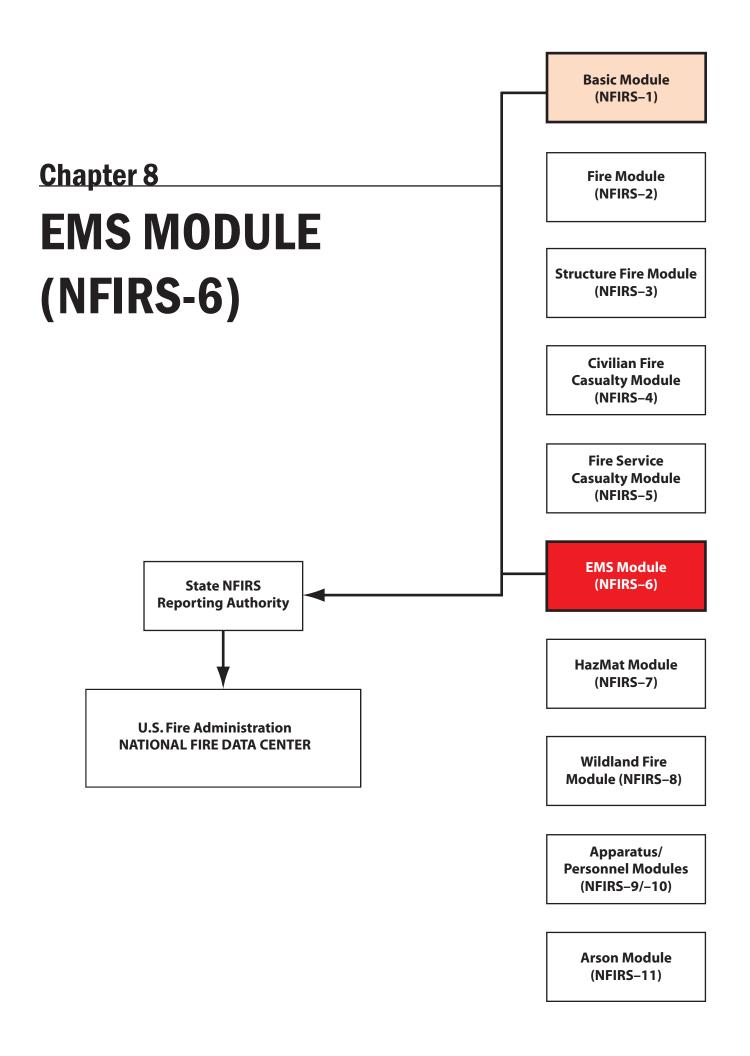
Enter the manufacturer's name, the model name, and the serial number.

The actual length of each of these three fields is 12 characters. Complete as much as possible to provide a positive identification.

Example

The face piece that melted was a Lingo Model 23–001, serial number 147AC01.





Α	FDID State Incident Date Station	□ Delete NFIRS-6 Incident Number ★ Exposure ★ □ Change
B Use D	Number of Patients Patient Number ☆ C Date/Time Check if same date as Alarm date Provider Impression/Assessment ☆ Check one box only	Time Arrived at Patient Time of Patient Transfer None/no patient or refused treatment
10 11 12 13 14 15 16	☐ Abdominal pain 18 ☐ Chest pain ☐ Airway obstruction 19 ☐ Diabetic symptom ☐ Allergic reaction 20 ☐ Do not resuscitate ☐ Altered LOC 21 ☐ Electrocution ☐ Behavioral/Psych 22 ☐ General illness ☐ Burns 23 ☐ Hemorrhaging/Bleeding ☐ Cardiac arrest 24 ☐ Hyperthermia ☐ Cardiac dysrhythmia 25 ☐ Hypothermia	26 Hypovolemia 34 Sexual assault 27 Inhalation injury 35 Sting/Bite 28 Obvious death 36 Stroke/CVA 29 OD/Poisoning 37 Syncope 30 Pregnancy/OB 38 Trauma 31 Respiratory arrest 00 Other 32 Respiratory distress 33 Seizure
E1 Age Month E2	Sunday Stheteler	G1 Human Factors
H ₁		ry Type The injury type for each body site listed under H1 H3 Cause of Illness/Injury Cause of illness/Injury Cause of illness/Injury
02 03 04 05 06 07 08	Procedures Used Check all applicable boxes No treatm Airway insertion Anti-shock trousers Assist ventilation Bleeding control Burn care Cardiac pacing Cardiac pacing Cardioversion (defib) manual Chest/Abdominal thrust CPR Cricothyroidotomy Defibrillation by AED EKG monitoring No treatm No t	Equipment Used or deployed by patient. Check all applicable boxes. 1 Pre-arrival arrest? If pre-arrival arrest, was it: 1 Witnessed? 2 Child safety seat 3 Airbag ions 4 Helmet 5 Protective clothing tion 6 Flotation device Initial Arrest Rhythm
L1 1 2 3 4 0 N	Initial Level of Provider □ First Responder □ EMT-B (Basic) □ EMT-I (Intermediate) □ EMT-P (Paramedic) □ Other provider □ No Training □ Highest Level of Care Provided On Scene □ First Responder 2 □ EMT-B (Basic) 3 □ EMT-I (Intermediate) 4 □ EMT-P (Paramedic) 0 □ Other provider	M Patient Status Marked M

CHAPTER 8 • EMS MODULE (NFIRS-6)

The EMS Module is an optional module. It should be used when that option has been chosen by your State or local authorities.

This module is completed only if the fire department provides emergency medical service. If an independent provider performs EMS, do not use this module.

The purpose of the EMS Module is to gather basic data as it relates to the provision of emergency medical care to the community. It may be used by both responding EMS unit(s) and responding fire suppression unit(s) that provide emergency medical services. This module does not include patient care information. The data collected from this form are incident based not patient based.

The EMS Module is not intended to replace or otherwise interfere with State or local EMS patient care reporting requirements. Instead, it is the intent that the data elements contained in this module be viewed as "core elements" and be included in the design of upgrades or new EMS data collection systems.

The EMS Module may be completed when an Incident Type 100–243, 311, 321-323, 351–381, 400–431, 451, or 900 is reported in Section C of the Basic Module (NFIRS–1).

■ If the EMS is a fire casualty, completion of a separate Fire Service Casualty Module (NFIRS–5) is required.

SECTION A

The guidance and directions for completing Section A of the EMS Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the EMS Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

■ Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🖈

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number

Entry

If the casualty resulted from an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition

Indicates a change to information submitted on a previous EMS Module or a deletion of all information regarding that patient.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this EMS patient and now want to have the data on this patient deleted from the database. If this box is marked, complete Section A, the Patient Number originally assigned (Section B), and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Number of Patients

Definition

Total number of patients who were treated by fire department emergency responders at the EMS incident.

Purpose

Fire departments can track the number of patients they treated at each EMS incident and identify how many EMS Modules should be completed for the incident (one per patient).

Entry

Enter the total number of patients.

Complete a separate EMS Module for each patient treated.

Example

Two people were injured in a bicycle accident:



Patient Number A

Definition

A unique number is assigned to each patient treated at a single EMS incident.

Purpose

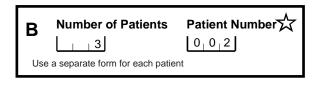
The patient number identifies each EMS patient separately in the EMS file. Data and other information concerning the patient can be accessed using this number in conjunction with other unique field information.

Entry

Enter the identification number assigned to this patient. A separate Patient Number is assigned to each EMS patient. The first patient is always coded "001," and each succeeding patient is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.

Example

Three patients needed medical attention in the wrecked automobile; this report is for patient number two:





SECTION C

Date and Time Arrived at Patient and Time of Patient Transfer

Definitions

Time arrived at patient. The time when the fire department's emergency personnel established direct contact with the patient.

Time of patient transfer. The time when the response unit physically left the scene to transport the patient to an emergency care facility or the time when the patient was transferred to another care provider.

Purpose

This information is needed to analyze time spent providing patient care on the scene of an incident. If the Apparatus/Personnel Module (NFIRS-9/-10) is also used, then this element can document situations when there is a significant delay between the time the response unit arrives on the scene and the time at which personnel can access the patient.

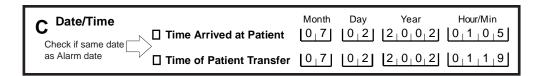
Entry

For each incident, enter the dates (mm/dd/yyyy) and times of day (using the 24-hour clock) when emergency personnel arrived at the patient and when the patient was transferred to another care provider. Midnight is 0000 and signifies the start of a new day.

• If the date(s) is the same as the Alarm date (Block E1, Basic Module), check the box(es) and enter only the time of day.

Example

The fire department BLS unit arrived at the patient at 0105 on July 2, 2002. The patient was transferred to the hospital 14 minutes later at 0199:



SECTION D

■ Provider Impression/Assessment ☆

Definition

The emergency care provider's primary clinical assessment that led to the management (treatments, medications, procedures) given to the patient.

Purpose

This element identifies whether the treatments or medications provided were consistent with the protocols related to the clinical impression.



Entry

Check or mark the box (one only) that best describes the emergency provider's impression/assessment. When more than one choice is applicable to the patient, choose the single most significant clinical assessment that drove the choice of treatment. Check or mark the None/No Patient or Refused Treatment box when there is no patient upon arrival or if the patient refused treatment.

Example

The patient suffered a traumatic injury as a result of a bicycle fall (38):

D Provider Impression/Assessment ☆ Check one box only			
10	18 Chest pain 19 Diabetic symptom 20 Do not resuscitate 21 Electrocution 22 General illness 23 Hemorrhaging/bleeding 24 Hyperthermia 25 Hypothermia	26 ☐ Hypovolemia 27 ☐ Inhalation injury 28 ☐ Obvious death 29 ☐ OD/poisoning 30 ☐ Pregnancy/OB 31 ☐ Respiratory arrest 32 ☐ Respiratory distress 33 ☐ Seizure	34 ☐ Sexual assault 35 ☐ Sting/bite 36 ☐ Stroke/CVA 37 ☐ Syncope 38 ☐ Trauma 00 ☐ Other

PROVIDER IMPRESSION/ASSESSMENT CODES

- 10 Abdominal pain. Includes an acute or painful abdomen and cramps. Excludes abdominal trauma (38).
- Airway obstruction. Includes choking, swelling of the neck, croup, epiglottis, and a foreign body in the air way.
- Allergic reaction. Includes reaction to drugs, plants, and insects. Reactions include hives, urticaria, and wheezing. Excludes stings and venomous bites (35).
- 13 Altered level of consciousness. Includes patients who appear to be substance abusers or under the influence of drugs or alcohol.
- Behavioral: mental status, psychiatric disorder. Includes all situations in which a behavioral or psychiatric problem is considered the major problem for the EMS provider.
- 15 Burns.
- 16 Cardiac arrest.
- 17 Cardiac dysrhythmia. Includes any rhythm disturbance that was noted on the physical examination or with a cardiac monitor when the rhythm was the major clinical reason for care rendered by the EMS responder.
- 18 Chest pain. Includes patients with chest pain related to heart disease, upset stomach, or muscle pain in the chest wall.
- 19 Diabetic symptom, related to history of diabetes. Includes hypoglycemia, ketoacidosis, and other complications of diabetes.
- 20 Do not resuscitate. Use when there is a legal requirement to prevent emergency medical personnel from initiating CPR.
- 21 Electrocution.
- 22 General illness.
- Hemorrhaging/Bleeding. Includes vaginal bleeding, GI bleeding, and epistaxis. When pregnancy is involved, only use bleeding if this is the major concern to the EMS responder.
- 24 Hyperthermia.
- Hypothermia. Usually relates to environmental hypothermia, such as following submersion in cold water, avalanches, or other environmental exposures.
- Hypovolemia. Includes patients with clinical shock, usually felt to be hypovolemic.
- 27 Inhalation injury, toxic gases. Includes smoke inhalation. Excludes overdose and poisoning (29).

Ε

- Obvious death. Patients who were dead upon arrival and no therapy was undertaken.
- Overdose/Poisoning. Includes taking inappropriate drugs, overdosing, and poisoning from chemicals. Excludes inhalation of toxic gases (27).
- 30 Pregnancy/OB. Includes all aspects of obstetric care rendered in the pre-hospital setting.
- Respiratory arrest. Includes incidents where the patient stops breathing and requires ventilatory support on at least a temporary basis.
- Respiratory distress. Includes patients who have only spontaneous breathing.
- 33 Seizure. Includes major and minor seizures.
- 34 Apparent sexual assault or rape.
- Sting/Bite. Includes poisonous snakes, insects, bees, wasps, ants, etc. If an allergic reaction occurs, use code 12.
- 36 Stroke, cerebrovascular accidents (CVA), or transient ischemic attack (TIA).
- 37 Syncope, fainting.
- 38 Trauma. Excludes abdominal pain (10).
- 00 Provider impression/assessment, other.
- NN None/No patient or refused treatment.

SECTION E

Age or Date of Birth

Enter either the patient's age or the patient's date of birth. Do not enter both.

Age

Definition

The patient's age in years or, if the patient is an infant, the age in months.

Purpose

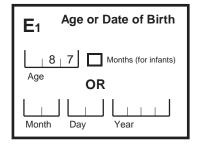
The age of the patient provides an indication of fire loss. Age can also be used to indicate type, severity, and cause of illness/injury to identify trends and patterns that might be helpful in planning injury prevention techniques.

Entry

Enter the age of the patient. Estimate the age if it cannot be determined. If the age is calculated in months, check or mark the Months (for Infants) box.

Example

The patient was 87 years old:



Date of Birth

Definition

The month, day, and year of birth of the patient.

Purpose

This data entry is an alternative entry to Age. It can provide an indication of fire loss, and can be used to indicate type, severity, and cause of illness/injury to identify trends and patterns that might be helpful in planning injury prevention techniques.

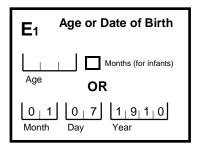
This data element is used as an alternate method for calculating the patient's age. Age is collected in NFIRS but Date of Birth is not.

Entry

Enter the date of birth showing the month, day, and year (mm/dd/yyyy).

Example

The patient was born on January 7, 1910:



Gender

Definition

The identification of the patient as male or female.

Purpose

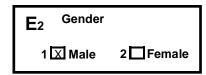
This entry assists in identifying the individual and for tracking trends and patterns.

Entry

Check or mark the box that indicates the patient's gender.

Example

The patient was a male (1):



GENDER CODES

- 1 Male.
- Female.

SECTION F

Race

Definition

The identification of the race of the patient, based on U.S. Office of Management and Budget (OMB) designations.

Purpose

This entry is useful for the study of diseases and important to data systems in order to obtain certain Federal or State funds that are directed toward specific racial groups.

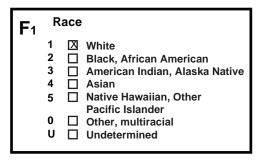
Entry

Check or mark the appropriate box. If race cannot be determined, check or mark the Undetermined box.

Hispanic is not considered a race, because a person can be black and Hispanic, white and Hispanic, etc.

Example

The patient was a white male (1):



RACE CODES

- 1 White.
- 2 Black or African American.
- 3 American Indian or Alaska Native.
- 4 Asian.
- 5 Native Hawaiian or other Pacific Islander.
- 0 Other. Includes multiracial.
- U Undetermined Ethnicity.

Ethnicity

Definition

Identifies the ethnicity of the patient. Ethnicity is an ethnic classification or affiliation. Ethnicity designates a population subgroup having a common cultural heritage, as distinguished by customs, characteristics, language, common history, etc. Currently, Hispanic/Latino is the only OMB designation for ethnicity.

Purpose

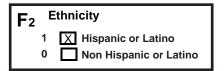
This entry permits an analysis of patients by ethnicity with type, severity, and cause of injury to identify trends and patterns that might be helpful in planning injury prevention techniques. It is also useful for studies of diseases and important to data systems in order to obtain certain Federal or State funds that are directed toward specific ethnic groups.

Entry

Check or mark the appropriate box.

Example

The patient was an Hispanic (1):



ETHNICITY CODES

- 1 Hispanic or Latino.
- 0 Non Hispanic or Latino.

SECTION G

Entries in this section collect information on the factors that contributed to the injury of the patient.

Human Factors Contributing to Injury

Human Factors Contributing to Injury was known as Condition Before Injury in NFIRS 4.1.

Definition

The physical or mental state of the person shortly before becoming a patient.

Purpose

This is an important data element for injury research used by public health researchers and policymakers. It is also useful for understanding the relationship between human factors and incident type, such as automobile accidents where the driver was "possibly impaired by alcohol."

Entry

Check or mark all the applicable boxes describing the human factors that contributed to the patient's injury. If no human factor was involved, check or mark the None box.

Example

A cigarette burned the patient after she fell asleep (1):

G ₁ Human Factors None Contributing to Injury
Check all applicable boxes
1 🛛 Asleep
2 Unconscious
3 Possibly impaired by alcohol
4 Possibly impaired by drug
5 Possibly mentally disabled
6 Physically disabled
7 Physically restrained
8 Unattended person

HUMAN FACTORS CONTRIBUTING TO INJURY CODES

- 1 Asleep, no known impairment.
- 2 Unconscious.
- 3 Possibly impaired by alcohol.
- 4 Possibly impaired by other drug or chemical.
- 5 Possibly mentally disabled.
- 6 Physically disabled. Includes temporary conditions or overexertion.
- 7 Physically restrained.
- 8 Unattended or unsupervised person. Includes persons too young/old to act.
- N None.

Other Factors

Definition

Factors contributing to the patient's injury other than those covered by Human Factors (Block G1).

• If the response was to an illness instead of an injury, skip to Block H3.

Purpose

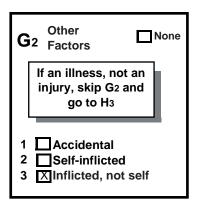
This is an important data element for injury research used by public health researchers and policymakers. This information is useful in determining the need for special training and safety precautions. It also helps identify trends and patterns such as the trend of inflicted (hostile) injuries over an extended period of time.

Entry

Check or mark the appropriate box. If the three codes are not applicable, check or mark the None box.

Example

A dog attacked the patient (3):



OTHER FACTORS CODES

- 1 Accidental.
- 2 Self-inflicted.
- Inflicted, not self-inflicted. Includes attacks by animals and persons.
- N None

SECTION H

This section collects information cause, type and location of the patient's injury.

Body Site of Injury

Body Site of Injury was known as Part of Body Injured in NFIRS 4.1

Definition

The area of the body that sustained the injury. This field is designed to be used in conjunction with Injury Type (Block H2).

Purpose

When combined with Injury Type and Cause of Injury, this entry provides useful data for EMS planners to track patient's injuries that required the use of the EMS system.

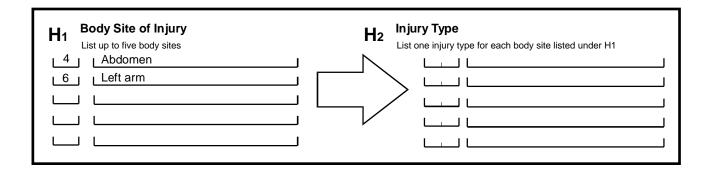
Entry

Enter up to five parts of the body where injuries occurred. List the body site with the most serious injury first. If the patient is suffering from an illness and not an injury, skip to Block H3.

- н
- This data element should reflect the clinical impression of the injury by the EMS responder, not necessarily the final or correct diagnosis.
- ► Each Body Site entered should have an associated Injury Type (Block H2). There is a one-to-one correspondence between Body Site and Injury Type.

Example

The patient's abdomen (4) and left arm (6) were injured in the accident:



BODY SITE OF INJURY CODES

- 1 Head.
- 2 Neck and shoulder.
- Thorax. Includes chest and back. Excludes spine (5).
- 4 Abdomen.
- 5 Spine. Excludes back (3).
- 6 Upper extremities. Includes arms and hands.
- 7 Lower extremities. Includes legs and feet.
- 8 Internal.
- 9 Multiple body parts.

Injury Type

Definition

The clinical description of the injury received by the patient.

Purpose

When combined with Body Site and Cause of Injury, this element enables EMS planners to analyze the types of injuries treated by EMS responders. This entry can be correlated with other data collected in the Basic and EMS Modules to provide useful information for tracking trends and reducing injuries. When used in conjunction with follow-up patient information, this data element is valuable in assessing the correlation between injury assessment in the field and actual injuries as evaluated in medical facilities.

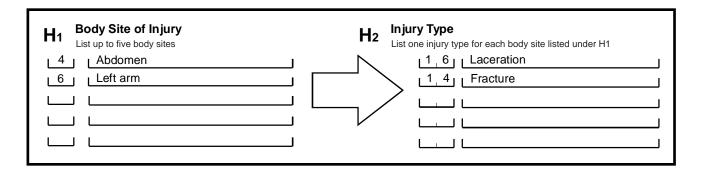
Entry

Enter a description of the primary injuries sustained by a patient for each part of the body listed in Block H1. The first Injury Type is associated with the first Body Site of Injury listed in Block H1, the second type with the second site, etc. Then select and record the appropriate code number for injury type recorded. If the patient is suffering from an illness and not an injury, skip to Block H3.

► Each Injury Type entered should have an associated Body Site (Block H2). There is a one-to-one correspondence between Injury Type and Body Site.

Example

The patient had a laceration on the abdomen (16) and a fracture of the upper left arm (14):



INJURY TYPE CODES

- 10 Amputation.
- 11 Blunt injury.
- 12 Burn.
- 13 Crush.
- 14 Dislocation/Fracture.
- 15 Gunshot.
- 16 Laceration.
- 17 Pain without swelling.
- 18 Puncture/Stab.
- 19 Soft tissue swelling.
- 00 Injury type, other.

Cause of Illness/Injury

Definition

The physical event that caused the injury or illness.

Purpose

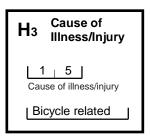
When combined with Body Site and Type of Injury, this element permits an understanding of the conditions causing injury or illness and provides a means of developing strategies to reduce injuries and sudden illnesses.

Entry

Enter the two-digit code that indicates the immediate cause or condition responsible for the injury or illness.

Example

The cause of the patient's injuries was a fall from a bicycle (15):



CAUSE OF ILLNESS/INJURY CODES

- 10 Chemical exposure. Includes accidental poisoning by solid or liquid substances, gases, and vapors, which are not included under accidental drug poisoning (11).
- Drug poisoning. Includes accidental poisoning by drugs, medicinal substances, or biological products.
- Fall. Excludes falls that occur in the context of other external causes of injury, such as fires, falling off boats, or falling in accidents involving machinery in operation.
- 13 Aircraft-related accident. Includes spacecraft.
- Bite. Includes animal bites, including non-venomous snakes and lizards. Excludes venomous stings (36).
- Bicycle accident. Includes any pedal cycle accident. Pedal cycle is defined to include bicycles and tricycles. Excludes motor vehicle or motorbike accidents.
- Building collapse/construction accident. Includes all accidents on construction sites. Not to be used for specific mechanism of injury (e.g., "Fall").
- Drowning, not related to watercraft use. Includes swimming accidents, bathtubs, etc.
- Electrical shock. Includes accidents related to electric current from exposed wires, faulty appliances, high-voltage cables, live rails, or open electric sockets. Excludes lightning (26).
- 19 Cold. Includes cold injuries due to weather exposure or cold produced by man, such as in a freezer.
- Heat. Includes thermal injuries related to weather or heat produced by man, such as in a boiler room or factory. Excludes heat injury from conflagration (22).
- 21 Explosives. Includes all injuries related to explosives. Excludes fireworks (25).
- Fire and flames. Includes burning by fire, asphyxia or poisoning from conflagration or ignition, and fires secondary to explosions.
- Firearm. Includes accidental and purposeful firearm injuries.
- 25 Fireworks. Injuries caused by pyrotechnics designed for or used for display purposes. Includes consumer fire works.
- Lightning. Excludes falling objects as a result of lightning and injuries from fires that are a result of lightning.
- Machinery. Includes machinery accidents except when machinery is not in operation. Excludes electrocution (18).
- Mechanical suffocation. Includes suffocation in bed or cradle (crib death), closed space suffocation, plastic bag asphyxia, and accidental hanging.
- 29 Motor vehicle accident. Includes any motor vehicle accident occurring on or off a public roadway or highway.
- Motor vehicle accident, pedestrian. Motor vehicle accidents in which the patient was a pedestrian struck by a motor vehicle of any type. Includes individuals on skates, in baby carriages, in wheelchairs, on skateboards, and on skis.

-]
- Non-traffic vehicle accident. Includes any motor vehicle accident occurring entirely off public roadways or highways. For instance, an accident involving an all-terrain vehicle (ATV) in an off-road location would be a non-traffic accident.
- 32 Physical assault/abuse. Includes all forms of battering and non-accidental injury to patients.
- 33 Scalds/Other thermal. Includes all burn injuries resulting from hot liquids or steam.
- 34 Smoke inhalation. Includes smoke and fume inhalation from fire.
- 35 Stabbing assault. Includes cuts, punctures, or stabs of any part of the body.
- Venomous sting. Includes bites and stings from venomous snakes, lizards, spiders, scorpions, insects, marine life, or plants. For animal bite, use 14.
- Water transport. Includes all accidents related to watercraft. Excludes drowning and submersion accidents (17) unless they are related to watercraft use. Thus, if a person falls out of a boat and drowns, it should be coded within this category. If a person drowns in a swimming pool or bathtub, it should be coded as "Drowning."
- 00 Cause of illness/injury, other.
- UU Unknown. Includes situations when data cannot be accurately reconstructed from the run record.

SECTION I

Procedures Used

Definition

The nature of the procedures attempted or performed on a patient by emergency personnel. The term procedures include anything done by way of assessment or treatment of the patient.

Purpose

Planners and educators use this information to determine which procedures are conducted in the field, by whom, and for what indications. This information can also help determine the equipment and supplies needed by emergency responders.

Entry

Check or mark all applicable boxes. If no treatment was provided, check only the No Treatment box.

Example

A laceration was bandaged to control bleeding (04), and a fractured arm was splinted (23):

Procedures Used Check all applic	cable boxes No treatment
O1 Airway insertion O2 Anti-shock trousers O3 Assist ventilation O4 Bleeding control O5 Burn care O6 Cardiac pacing O7 Cardioversion (defib) manual O8 Chest/abdominal thrust O9 CPR OF Cricothyroidotomy OF CERCONDITION OF C	14 Intubation (EGTA) 15 Intubation (ET) 16 IO/IV therapy 17 Medications therapy 18 Oxygen therapy 19 OB care/delivery 20 Prearrival instructions 21 Restrain patient 22 Spinal immobilization 23 Splinted extremities 24 Suction/aspirate 00 Other

J

PROCEDURES USED CODES

- 01 Airway insertion.
- 02 Anti-shock trousers.
- 03 Assist ventilation.
- 04 Bleeding control.
- 05 Burn care.
- 06 Cardiac pacing.
- 07 Cardioversion (defibrillation), manual.
- 08 Chest/Abdominal thrust.
- 09 CPR.
- 10 Cricothyroidotomy.
- 11 Defibrillation by AED.
- 12 EKG monitoring.
- 13 Extrication.
- 14 Intubation (EGTA).
- 15 Intubation (ET).
- 16 IO/IV therapy.
- 17 Medications therapy.
- 18 Oxygen therapy.
- 19 Obstetrical care/delivery.
- 20 Prearrival instructions.
- 21 Restrained patient.
- 22 Spinal immobilization.
- 23 Splinted extremities.
- 24 Suction/Aspirate.
- 00 Procedures used, other.
- NN No treatment.

SECTION J

Safety Equipment

Definition

The types of safety equipment in use by the patient at time of injury.

Purpose

This element provides important information about safety devices used. The data can be used with police reports concerning collisions, tracking various trends and patterns, and determining the focus of public education campaigns.

Entry

Check or mark all applicable boxes to indicate the safety equipment that was in use. If no safety equipment was used, check or mark the None box.

Example

The patient was wearing a helmet when the bicycle accident occurred (4):

Example on next page

J	Safety Equipment Used or deployed by patient. Check all applicable boxes.
1 2 3 4 5 6 0 U	☐ Safety/seat belts ☐ Child safety seat ☐ Airbag ☑ Helmet ☐ Protective clothing ☐ Flotation device ☐ Other ☐ Undetermined

SAFETY EQUIPMENT CODES

- 1 Safety, seat belts.
- 2 Child safety seat.
- 3 Airbag.
- 4 Helmet.
- 5 Protective clothing.
- 6 Flotation device.
- 0 Safety equipment, other.
- N None.
- U Undetermined.

SECTION K

This section is completed only if the patient went into or was found in cardiac arrest.

Cardiac Arrest

When Cardiac Arrest Occurred

Definition

When the cardiac arrest occurred in relation to the arrival of fire department's EMS personnel and whether CPR was performed before EMS personnel arrived.

Purpose

The effectiveness of bystander CPR on morbidity (or patient outcome) on a cardiac arrest patient can be determined.

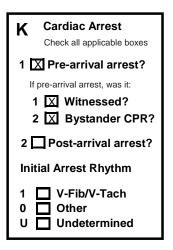
Entry

Check or mark all applicable boxes. The intent here is to determine whether it was a pre-arrival or post-arrival arrest. If it was a pre-arrival arrest, check whether it was witnessed or whether bystander CPR was performed.

K

Example

The patient went into cardiac arrest while eating dinner (1) and a bystander witnessed the incident and initiated CPR (2):



CARDIAC ARREST CODES

- 1 Pre-arrival arrest.
- 2 Post-arrival arrest.

PRE-ARRIVAL DETAILS CODES

- 1 Witnessed.
- 2 Bystander CPR.

Initial Arrest Rhythm

Definition

The patient's initial heart arrest rhythm as measured by the fire department's EMS personnel with an EKG monitor.

Purpose

This element tracks trends and patterns in the types and the survival of cardiac patients.

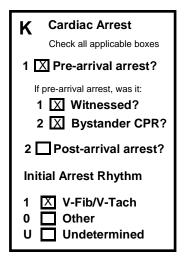
Entry

Check or mark the appropriate box.

Example

The patient's arrest rhythm was V-Tach (1):

Example on next page



INITIAL ARREST RHYTHM CODES

- 1 V-Fib/V-Tach.
- 0 Initial arrest rhythm, other.
- U Undetermined.

SECTION L

This section collects information on the level of training of the fire department responder who treated the patient and the level of care the responder provided.

Initial Level of Provider ☆

Definition

The certified training level of the first fire department responder(s) to treat the patient.

Purpose

This element aids researchers in identifying trends of pre-hospital care delivered by the fire service. This information may also aid researchers in evaluating the effect of pre-hospital CPR and cardiac care on morbidity (or patient outcomes).

Entry

Check or mark the box that best describes the level of care the first responder was trained to provide as certified by the fire department or State.

Example

The first fire department responder to arrive on the scene and treat the patient was a first responder (1):

Example on next page

INITIAL LEVEL OF PROVIDER CODES

- 1 First responder.
- 2 EMT-B (Basic).
- 3 EMT-I (Intermediate).
- 4 EMT-P (Paramedic).
- Other health care provider. Includes doctor, nurses, etc.
- N No training.

Highest Level of Care Provided on Scene

Definition

The highest level of fire department care that the patient received at the scene of the EMS incident.

Purpose

This element determines the personnel and equipment requirements for handling EMS incidents. This information may also aid researchers in evaluating the effect of pre-hospital care on morbidity (or patient outcome).

Entry

Check or mark the box that indicates the highest level of care provided at the scene by the fire department. If no care was provided, check or mark the None box.

Example

The fire department provided intermediate-level treatment at the scene (3):

L2 Highest Level of Care Provided On Scene		
1		First Responder
2		EMT-B (Basic)
3	X	EMT-I (Intermediate)
4		EMT-P (Paramedic)
0		Other provider

HIGHEST LEVEL OF CARE PROVIDED ON SCENE CODES

- 1 First responder.
- 2 EMT-B (Basic).
- 3 EMT-I (Intermediate).
- 4 EMT-P (Paramedic).
- Other health care provider. Includes doctors, nurses, etc.
- N No care provided.

SECTION M

Patient Status

Definition

The overall change in the status of the patient as recorded at the time responsibility for the patient is transferred to another agency.

Purpose

This element is used to track trends and patterns in relation to the status of the patient at the time of transfer. This entry can also be correlated with other data collected in the EMS module to evaluate pre-hospital care and its influence on patient outcomes.

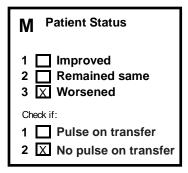
Entry

Check or mark the box that best describes the patient's status when he/she was transferred to another agency for care as compared to the patient's status when the fire department began treatment.

Remember to check or mark the box indicating whether or not the patient had a Pulse on Transfer.

Example

The patient's status worsened as the incident progressed (3); by the time he was transferred to hospital care, he had no pulse (2):



PATIENT STATUS CODES

- 1 Improved.
- 2 Remained same.
- 3 Worsened.

PULSE ON TRANSFER CODES

- 1 Pulse on transfer.
- 2 No pulse on transfer.

SECTION N

EMS Disposition

Definition

A description of whether or not the patient was transported from the scene and, if transported, who provided the transport.

Purpose

This element is used to correlate the initial call for service with the final actions in the field by providers. For instance, it may be valuable to know how often EMS is activated for patients who require no treatment or transport. Reports generated from this data element may be of use in coordinating the dispatch and responder functions.

Entry

Check or mark the box that describes the disposition of the patient. Check or mark the Not Transported box if the patient was not removed from the scene.

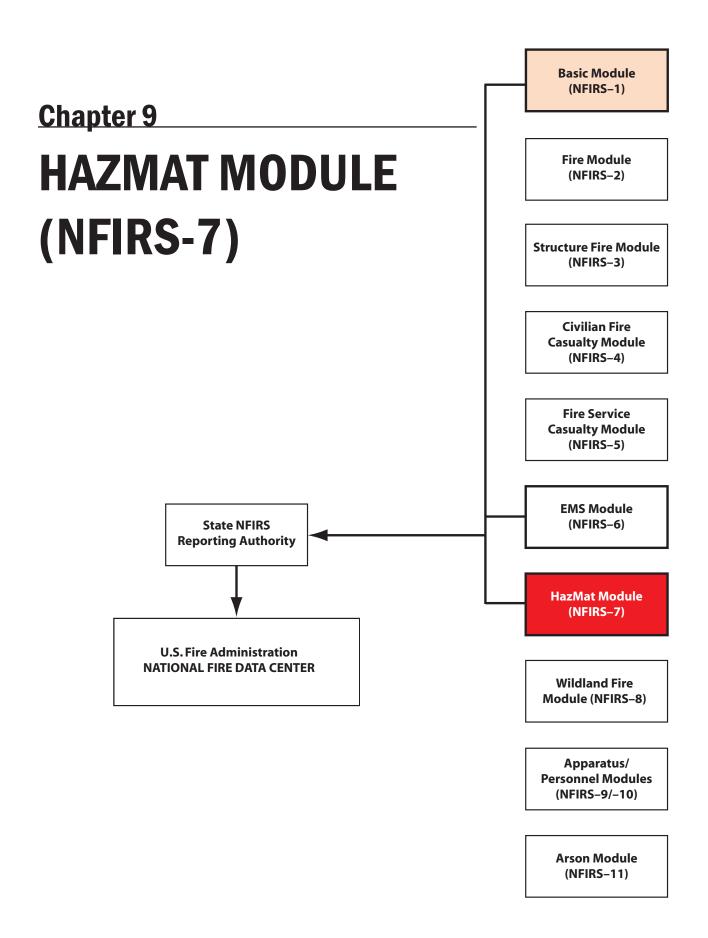
Example

The patient was transported to the hospital by the fire department (1):

N EMS	Sition Not transported
1 X 2	FD transport to ECF Non-FD transport Non-FD trans/FD attend Non-emergency transfer Other

EMS DISPOSITION CODES

- Fire department transport to emergency care facility (ECF). Includes situations where the EMS responder transports a patient to a rendezvous point for transfer to another EMS responder.
- Non-fire department transport. Fire department EMS responder provided treatment at the scene, but the patient was transferred to the care of another service (at the scene).
- Non-fire department transport with fire department attendant. Fire department EMS responder provided treatment or came upon the scene of a private provider giving treatment and assisted, then rode with the non-fire department transport to the ECF.
- 4 Non-emergency transfer. Includes interfacility transfers under non-emergency conditions.
- 0 EMS disposition, other.
- N Not transported by EMS.



A LI State & Incident Date & Station Incident Number & Exposure & Haz No. & Change				
B HazMat ID UN Number DOT Hazard Classification CAS Registration Number Chemical Name				
Type Container Type More hazardous materials? Use additional sheets.	VOLUME 11 □ Ounces	When Released Amount released: by volume or weight 1		
of this form only for the first hazardous material involved in this incident. Released From	F2 Population Density 1 Urban 2 Suburban 3 Rural G1 Area Affected 1 Square feet 2 Blocks 3 Square miles Enter measurement	G2 Area Evacuated None None HazMat Actions Taken		
J Cause of Release ☆ K Factors Contributing to Release I Intentional I Unintentional release Container/Containment failure Act of nature Cause under investigation Cause undetermined after investigation Factor contributing to release (2) Factor contributing to release (3) Factor s Affecting Mitigation Involve Enter up to three factors or impediments that affected the mitigation of the incident. Factor or impediment (1) Factor or impediment (2) Factor or impediment (3)				
M Equipment Involved in Release Equipment involved in release Brand	None Nobile Relea Mobile property	1		

CHAPTER 9 • HAZARDOUS MATERIALS MODULE (NFIRS-7)

The Hazardous Materials (HazMat) Module is an optional module. It should be used when that option has been chosen by your State or local authorities.

The HazMat Module is used when the Other box in Block H3 ("Hazardous Materials Release") of the Basic Module (NFIRS-1) has been checked. Its purpose is to document reportable HazMat incidents. Generally speaking, a reportable HazMat incident is when either:

1. Specialized HazMat resources were dispatched or used, or should have been dispatched or used, for assessing, mitigating, or managing the situation.

OR

2. Releases or spills of hazardous materials that exceed 55 gallons occur.

Nothing in this definition is meant to alter compliance with State or local HazMat reporting requirements. In States with mandatory reporting, the State reporting authority determines which optional modules (EMS, HazMat, Wildland, etc.) are to be submitted to the State.

The HazMat Module permits hazardous materials incidents to be thoroughly profiled for incident management analysis and response strategy development. It collects relevant information on:

- Hazardous materials identification.
- Container information.
- Release amounts and location.
- Actions taken.
- Mitigating factors.

In addition, aggregated data on hazardous materials incidents will provide invaluable information that can be used by policymakers who develop regulations for the storage, use, and transportation of hazardous materials. It can also be used to develop recommended guidance for emergency personnel response to HazMat incidents.

■ If more than one HazMat was involved, one form is completed for each HazMat released. (The term release is intended to include spill.)

SECTION A

The guidance and directions for completing Section A of the HazMat Module are essentially the same as for Section A in the Basic Module. One additional field is included in Section A of the HazMat Module (Haz No.). It is stressed that the entries in Section A of the HazMat Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

■ Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🖈

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number \$\frac{1}{2}\$

Entry

If the HazMat release was in connection with a fire incident and the release was in an exposure property, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

HazMat Number (Haz No.) ☆

Definition

A unique HazMat number is assigned to each hazardous material involved in the incident.

Purpose

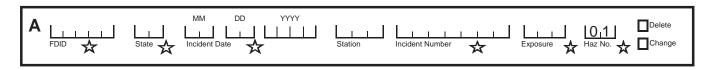
Distinguishes among multiple hazardous materials involved in the incident. Data and information concerning the HazMat can be accessed using this number in conjunction with other unique field information.

Entry

Enter the HazMat number for the particular HazMat reported on this module. A separate Haz No. is assigned to each HazMat involved. The first material is always coded "01," and each succeeding material is numbered sequentially and incremented by 1 beginning with "02." The two-character numeric field is zero filled, not right justified.

Example

An incident involving a release from two drums, where the first drum is filled with a flammable liquid and the second drum contains a weak acid. Since two hazardous materials are involved, two separate HazMat Modules are completed. The Haz No. for the first drum would be "01" and the second would be "02":



Delete/Change

Definition

Indicates a change to information submitted on a previous HazMat Module or a deletion of all information regarding that specific HazMat release.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this HazMat release and now want to have the data on this release deleted from the database. If this box is marked, complete Section A, including the HazMat number assigned to this HazMat, and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this HazMat release to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

HazMat ID

The purpose of Section B is to identify the hazardous materials involved in an incident as specifically as possible. Several identification systems exist that can aid fire department personnel in identifying hazardous materials:

- UN Number
- DOT Hazard Classification
- CAS Registration Number
- Chemical Name

В

Identification of specific hazardous materials involved in fire or rescue incidents is a priority for emergency response personnel.

UN Number

Definition

A four-digit number assigned to the hazardous material that conforms to United Nations (UN) standards for the identification of hazardous materials in international transportation. In some cases, a single UN number will be assigned to several materials with similar properties. Not all hazardous materials have been assigned a UN number.

Purpose

Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policymakers, prevention efforts, and training curricula.

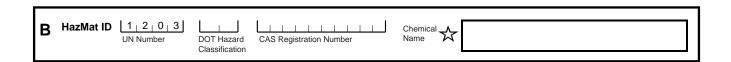
Entry

Enter the four-digit UN number assigned to the hazardous material. Leave the entry blank if a UN number has not been assigned.

These numbers may be found in a variety of reference materials, including USFA's Hazardous Materials Guide for First Responders and the North American Emergency Response Guidebook (NAERG), published by the Research and Special Programs Administration, U.S. Department of Transportation (DOT). A list of commonly encountered materials is included in Appendix D.

Example

Enter the UN Number "1203" for a hazardous materials release involving gasoline:



DOT Hazard Classification

Definition

The Department of Transportation hazard classification describes the primary hazard associated with various categories of hazardous materials. The DOT hazard classification is intended for use on placards or labels during the transportation of hazardous materials. Since many materials have multiple hazards, these placards or labels may not describe all of the potential hazards faced by emergency responders at a HazMat incident.

Purpose

Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policymakers, prevention efforts, and training curricula.

Entry

Enter the two-digit code that corresponds with the hazard classification and division code as found on a placard or label, in the NAERG, or from the list below.

The DOT Hazard Classification consists of a single-digit hazard class code, followed by a decimal point and a single-digit code for the division. For NFIRS data collection, this two-part hazard class/division code has been converted into a two-digit code.

Example

The HazMat release was a flammable liquid (30):



DOT HAZARD CLASSIFICATION CODES

Class 1 – Explosives

- Division 1.1 Explosives with mass explosion hazard.
- 12 Division 1.2 Explosives with projectile hazard.
- Division 1.3 Explosives with predominant fire hazard.
- Division 1.4 Explosives with no significant blast hazard.
- Division 1.5 Very insensitive explosives; blasting agents.
- Division 1.6 Extremely insensitive detonating articles.

Class 2 - Gases

- 21 Division 2.1 Flammable gases.
- Division 2.2 Non-flammable, non-toxic compressed gases.
- 23 Division 2.3 Gases toxic by inhalation.
- 24 Division 2.4 Corrosive gases (Canada).

Class 3 – Flammable Liquids (and Combustible Liquids (U.S.))

30 Flammable and combustible liquids.

Class 4 – Flammable Solids, Spontaneously Combustible Materials, and Dangerous-When-Wet Materials

- 41 Division 4.1 Flammable solids.
- Division 4.2 Spontaneously combustible materials.
- Division 4.3 Dangerous-when-wet materials.

Class 5 - Oxidizers and Organic Peroxides

- 51 Division 5.1 Oxidizers.
- 52 Division 5.2 Organic peroxides.

Class 6 - Toxic Materials and Infectious Substances

- 61 Division 6.1 Toxic materials.
- 62 Division 6.2 Infectious substances.

Class 7 - Radioactive Materials

70 Radioactive materials.

Class 8 - Corrosive Materials

80 Corrosive materials.

Class 9 – Miscellaneous Dangerous Goods

- 91 Division 9.1 Miscellaneous dangerous goods (Canada).
- 92 Division 9.2 Environmentally hazardous substances (Canada).
- 93 Division 9.3 Dangerous wastes (Canada).
- UU Undetermined.

В

CAS Registration Number

Definition

The identification number assigned to a chemical by the Chemical Abstract Service (CAS) of the Chemical Abstract Society. Not all hazardous materials have an assigned CAS number.

Purpose

Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policymakers, prevention efforts, and training curricula.

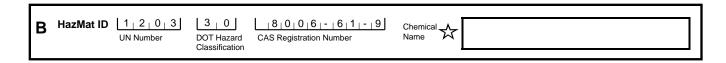
Entry

Enter the number assigned by the CAS to the chemical. This number may be found in reference materials, on Material Safety Data Sheets (MSDSs), and on some product labels. A list of CAS numbers for commonly encountered chemicals is included in Appendix D. Leave the entry blank if a CAS registration number has not been assigned.

Enter the number as it appears, including dashes.

Example

For gasoline, enter the CAS number "8006-61-9":



Chemical Name ☆

Definition

A standard chemical or trade name by which the hazardous material is commonly known. Products from different manufacturers with similar active chemical ingredients may have different trade names.

Purpose

Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policymakers, prevention efforts, and training curricula.

Entry

Enter the chemical or trade name of the hazardous material as shown on the MSDS, product label, packaging, or container.

Example

A common herbicide used for household applications may be entered by the trade name "Weed-B-GoneTM," or by the chemical name "2,4-Dichlorophenoxyacetic acid":



Those chemicals listed in the Hazardous Materials Guide for First Responders, published by the USFA, are also cross-referenced in Appendix D.

SECTION C

This section collects information on the type and capacity of the container involved in the HazMat release.

Container Type

Definition

The type or configuration of the container, equipment, or facility used to transport or store the hazardous material.

Purpose

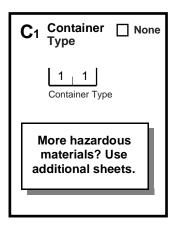
Aggregate information on the types of containers involved in HazMat incidents may provide (1) guidance to regulators that establish container design requirements and (2) direction to prevention and code development efforts, emergency response training, and policymaking.

Entry

Enter the two-digit code for the container type. If no container was involved, check or mark the None box and skip to Block D1.

Example

The release was from a drum (11):



CONTAINER TYPE CODES

Portable Container. A container designed to be transported to a location and left there until emptied, when it may be disposed of or returned to a vendor for refill and reuse.

- Drum. Cylindrical container used to hold non-bulk quantities of product typically in the 55-gallon range.

 Drums can be of closed- or open-head design and can be constructed of a range of materials, including metal, plastic, or fiberboard. Drums can be used for liquid or solid materials, including flammable liquids or solvents, corrosives, poisons, and other hazardous materials.
- 12 Cylinder. Container used for storing pressurized, liquefied, and dissolved gases. The three types of cylinders include aerosol containers, uninsulated containers, and cryogenic/insulated containers. Cylinders are usually constructed of metal, but some aerosol containers may be plastic or glass. Cylinders have a wide range of service pressures from a few psi to several thousand psi. Some examples of materials stored in cylinders include acetylene, oxygen, carbon dioxide, nitrogen, and propane. Large cylinders known as "ton containers" are used to store chlorine.
- Can or bottle. Container used to store quantities of liquids or solids often intended for household or laboratory use. Cans and bottles can be constructed of metal, glass, plastic, or ceramic. Flammable liquids, solvents, corrosives, and other hazardous materials can be stored in these containers.
- 14 Carboy. A glass or plastic container used to store moderate amounts (up to over 20 gallons) of liquids in industrial or laboratory settings. Carboys are usually shipped in an outer packaging of polystyrene or wood.
- Box or carton. Rigid packages that completely enclose their contents; they can be constructed of metal, plastic, fiberboard, or wood. Boxes or cartons can be used to store liquids or solids and can contain a wide range of hazardous materials. They can also be used as exterior packaging around bottles or cans and can contain radioactive or infectious materials packaged for use in medical facilities or laboratories.
- Bag or sack. Most commonly used for the storage of solid materials, but can also be used for liquids. Bags and sacks can be constructed of cloth, paper, plastic, or a combination of materials in sizes ranging from a few to 100 pounds of material. Flexible intermediate bulk containers (FIBCs), known as "supersacks," can contain from 119 to 793 gallons of product.
- 17 Cask. Specially designed, tested, and certified containers designed to transport highly radioactive materials. They are constructed to withstand high impacts and have a very low potential of container failure.
- 18 Hose. A portable, flexible tube used to transfer liquid product from one location to another.
- Portable container, other. A container that meets the definition of a portable container but is not specified below.

Fixed Container. A container designed and built in a fixed location that is not intended to be moved or transported from that location.

- Tank or silo. These containers can hold a wide range of liquid or solid materials in quantities ranging from several pounds or gallons to bulk storage tanks that can hold thousands of gallons of product. They are usually constructed of metal and may or may not be pressurized.
- Pipe or pipeline. Pipes are used to transport liquids or gases from one location to another. They can be constructed of metal, PVC, or plastic. Pipes can begin and end within a fixed facility, or they may travel some distance as part of a pipeline.
- Bin. Used to store any quantity of solid or granular materials at a fixed facility. Bins can be open or closed and are often used for materials that are insensitive to moisture or minimally reactive.
- Machinery or process equipment. Equipment used for the manufacture of chemical compounds at a fixed facility. Process equipment may include a variety of containers that are combined to facilitate the reaction of chemicals into different compounds.
- Hose. A fixed, flexible hose that can be permanently attached to a storage vessel or can be used to transport materials from one location to another within a facility.
- Fixed container, other. A container that meets the definition of a fixed container but is not specified below.

Natural Containment. Any feature that is part of the permanent topography of the area. Natural containment areas can be manmade (for example, a manmade lake or pond).

Sump or pit. A depression created in the ground that forms a containment area for the storage of liquid or solid materials. Includes sewage treatment or sludge pits.

- Pond or surface impoundment. A natural containment feature used to hold liquid or solid materials, such as a manure pond at a farm or water storage areas at a wastewater treatment facility.
- Well. A well is a deep hole in the ground that was originally intended to provide access to groundwater. Dry wells can be used for the storage of hazardous materials.
- Dump site or landfill. A location where various articles of trash and rubbish are routinely deposited (legally or otherwise). Dump sites and landfills may contain a wide variety of hazardous substances.
- Natural containment, other. A containment that meets the definition of a natural container but is not specified below.

Mobile Container. A container designed to be transported from one location to another, intended to store quantities of product that can be offloaded at intermediate locations, or provided for the use of the transporting vehicle itself.

- Vehicle fuel tank and associated piping. Vehicle fuel tanks are mobile tanks that can hold from a few gallons to several thousand gallons of product. Vehicle fuel tanks provide fuel solely for the operation of the vehicle.
- 42 Product tank on or towed by vehicle. These mobile containers may be on the vehicle or towed behind it. They are usually intended to transport product from one location to another for offloading or storage. This includes semi-trailers, trailers, or vehicles specifically designed for the transport of a commodity such as home heating oil or propane.
- Piping associated with mobile product tank loading or offloading. The piping and associated loading/offloading hardware attached to the mobile container.
- Hose. A flexible hose used for loading or offloading mobile containers after it is attached to a discharge pipe or outlet.
- 40 Mobile container, other. Any container that fits the definition of a mobile container but is not classified below.

Other Containers

- Rigid intermediate bulk containers (RIBCs). RIBCs can contain from 119 to 793 gallons of liquid or solid product. They are used for the transport and storage of a wide variety of materials and may be constructed of steel or aluminum, but are often formed from rigid polyethylene. RIBCs are transported to a fixed facility where they are used until they are emptied of product, after which they are returned to a vendor for refill and reuse.
- 00 Container type, other.
- NN None.
- UU Undetermined.

Estimated Container Capacity

Definition

The amount of material the container was designed to hold. The container capacity is reported as two data elements. One is a numeric entry and expresses quantity (Block C2); the other defines the unit of measure (Block C3).

■ Both the quantity (Block C2) and the unit of measure (Block C3) must be reported for the data to be meaningful.

Purpose

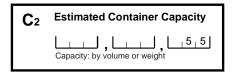
Aggregate information on the size of containers involved in HazMat incidents may provide (1) guidance to regulators that establish container design requirements and (2) direction to prevention and code development efforts, emergency response training, and policymaking.

Entry

Enter the estimated amount of material that the container was designed to hold, by volume or weight, to the nearest whole unit of measure.

Example

Enter "55" for a 55-gallon drum:



Units: Capacity

Definition

The unit of measure that defines, by volume or weight, the capacity of the hazardous materials container.

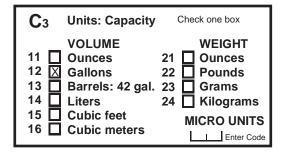
■ Both the quantity (Block C2) and the unit of measure (Block C3) must be reported for the data to be meaningful.

Entry

Check or mark the appropriate unit of measure.

Example

The unit of measure for the drum is gallons (12):



UNITS: CAPACITY CODES

Volume Units

- 11 Ounces (liquid).
- 12 Gallons.
- 13 Barrels (42 gal).
- 14 Liters.
- 15 Cubic feet.
- 16 Cubic meters.

Weight Units

- Ounces (weight).
- Pounds.
- 23 Grams.
- 24 Kilograms.

Micro Units

- 31 Parts per billion.
- 32 Parts per million.
- 33 Micro Roentgen.
- 34 Milli Roentgen.
- 35 Roentgen.
- 36 RAD.
- 37 REM.
- 38 Curie.

SECTION D

■ Estimated Amount Released ☆

Definition

The amount of hazardous material released from a container expressed as a standard unit of measure. The quantity released is reported as two data elements. One is a numeric entry and expresses quantity (Block D1); the other defines the unit of measure (Block D2).

■ Both the quantity (Block D1) and the unit of measure (Block D2) must be reported for the data to be meaningful.

Purpose

Aggregate information on the amount of HazMat released provides an important measure of the magnitude of the release problem.

Entry

Enter the estimated amount of material released from the container, by volume or weight, to the nearest whole unit of measure.

Example

The HazMat release was estimated at 100 gallons of material:



Units: Released

Definition

The unit of measure, by volume or weight, for the amount of the hazardous material released from the container.

D

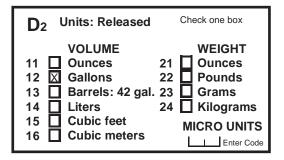
■ Both the quantity (Block D1) and the unit of measure (Block D2) must be reported for the data to be meaningful.

Entry

Check or mark the appropriate unit of measure.

Example

The unit of measure for the release is gallons (12):



UNITS: RELEASED CODES

Volume Units

- 11 Ounces (liquid).
- 12 Gallons.
- Barrels (42 gal).
- 14 Liters.
- 15 Cubic feet.
- 16 Cubic meters.

Weight Units

- 21 Ounces (weight).
- Pounds.
- 23 Grams.
- 24 Kilograms.

Micro Units

- 31 Parts per billion.
- 32 Parts per million.
- 33 Micro Roentgen.
- 34 Milli Roentgen.
- 35 Roentgen.
- 36 RAD.
- 37 REM.
- 38 Curie.

SECTION E

This section deals with the physical state of the HazMat and the environment in which it was released.

Physical State When Released

Definition

The simple physical state of the material during release.

Purpose

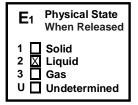
Aggregate information on the physical state of hazardous materials being released can reveal trends or patterns for particular materials, classes of materials, and physical states. These trends may provide direction for policymakers, prevention efforts, and training curricula.

Entry

Check or mark the box best describing the physical state of the material when released.

Example

The release of hazardous material was in a liquid state (2).



PHYSICAL STATEWHEN RELEASED CODES

- 1 Solid.
- 2 Liquid.
- 3 Gas.
- U Undetermined.

Released Into

Definition

The general environment contaminated by the hazardous material after release.

Purpose

Aggregate information on environmental contamination can provide insight on the extent and environmental impact of hazardous materials releases. This may provide important information to resource planners and policymakers who develop zoning ordinances and regulations for the use or transportation of hazardous materials.

F

Entry

Enter the code that best describes the environment contaminated by the hazardous material.

Example

A hazardous materials release spread down a street and into a river (4):



RELEASED INTO CODES

- 1 Air.
- Water.
- 3 Ground.
- 4 Water and ground.
- 5 Air and ground.
- 6 Water and air.
- 7 Air, water, and ground.
- 8 Confined, no environmental impact; not released into air, water, or ground.

SECTION F

Information on the location of the release and the population density in the area of the release is captured in this section.

Released From

Definition

The physical location from which the hazardous material was released.

Purpose

Aggregate information on the physical location of hazardous material releases may reveal trends or patterns for particular materials, classes of materials, and physical states. These trends may provide direction for code enforcement or prevention efforts, policymakers, and training curricula.

Entry

If the location of the release was below grade, check or mark the Below Grade box. If the release was inside or on a structure, check or mark the Inside/On Structure box and enter the Story of Release directly below. If the release was outside a structure, check or mark the Outside of Structure box.

- For purposes of HazMat data collection, Below Grade also refers to underground releases.
- Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example

The HazMat release came from an above-ground pipeline (2):



RELEASED FROM CODES

- 1 Inside or on structure.
- 2 Outside of structure.

Population Density

Definition

An estimate of the population density in the area of the hazardous materials release.

Purpose

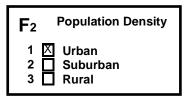
Aggregate information on the population density of areas where hazardous materials are released can help define prevention, enforcement, training, and emergency response needs for different areas.

Entry

Check or mark the box best describing the area where the hazardous material was released.

Example

The HazMat release occurred in a busy city center (1):



POPULATION DENSITY CODES

- 1 Urban center. Densely populated with extensive development.
- Suburban. Predominantly single-family residential, within a short distance of an urban area. Suburban communities are less densely populated than urban areas but may contain areas of significant development.
- Rural. Scattered small communities and isolated family dwellings. Rural areas may be sparsely populated with widely scattered homes or housing developments.

SECTION G

This section collects information on the size of the area affected by a HazMat release and whether an evacuation occurred.

Area Affected

Definition

The amount of area or space directly affected by the hazardous material release. This does not include the area evacuated, on the area contaminated. Evacuation information is recorded in Blocks G1 and G2.

■ Both the Area Affected (Block G1) and the Area Evacuated (Block G2) must be reported for the data to be meaningful.

Purpose

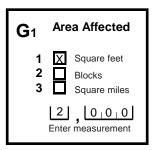
Information on the area affected guides future planning and incident management efforts.

Entry

Check or mark the appropriate unit-of-measurement box and enter the numeric value for the measurement of the area affected.

Example

A HazMat release affected a 2,000-square-foot area (1):



AREA AFFECTED CODES

- 1 Square feet.
- 2 Blocks.
- 3 Square miles.

Area Evacuated

Definition

The amount of area or space evacuated as a result of the hazardous materials release or potential release. This includes the contaminated area (Block G1).

■ Both the Area Affected (Block G1) and the Area Evacuated (Block G2) must be reported for the data to be meaningful.

Purpose

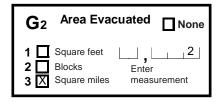
Information on the area evacuated can guide future training and incident management efforts. It is also an indirect measure of the amount of emergency resources needed to deal with the release.

Entry

Check or mark the appropriate unit-of-measurement box and enter the numeric value for the measurement (rounded to the nearest whole number) of the area evacuated. If there was no evacuation, check or mark the None box.

Example

A daytime chlorine release necessitated the evacuation of 2 square miles (3).



AREA EVACUATED CODES

- 1 Square feet.
- 2 Blocks.
- 3 Square miles.

Estimated Number of People Evacuated

Definition

The estimated number of people evacuated due to the hazardous materials release or potential release.

Purpose

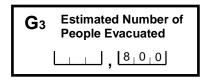
Information on the number of people evacuated can provide important information to resource planners and policymakers developing zoning ordinances or regulations for the use and transportation of hazardous materials. This information may also help direct future training and incident management efforts for emergency response personnel. It is also an indirect measure of the amount of emergency resources needed to deal with the release.

Entry

Enter the estimated number of people evacuated.

Example

An estimated 800 people were evacuated from a high school that was the site of a hazardous material release in a chemistry laboratory:



Estimated Number of Buildings Evacuated

Definition

The estimated number of buildings evacuated due to the hazardous materials release or potential release.

Purpose

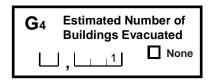
Information on the number of buildings evacuated can provide important information to resource planners and policymakers developing zoning ordinances or regulations for the use and transportation of hazardous materials. This information may also help direct future training and incident management efforts for emergency response personnel. It is also an indirect measure of the amount of emergency resources needed to deal with the release.

Entry

Enter the estimated number of buildings evacuated. Include buildings that were already empty in the evacuated area (e.g., houses during the day with no one home). If no buildings were evacuated, check or mark the None box.

Example

A two-story commercial structure with a hazardous materials release from a dry cleaning establishment on the first floor was evacuated:



SECTION H

HazMat Actions Taken

Definition

Specialized HazMat response actions taken at the scene of an incident by personnel specifically trained and equipped to mitigate hazards arising from hazardous materials releases. Other actions taken by fire service personnel should be entered in the Basic Module.

Purpose

Information on the actions taken by specialized hazardous materials response personnel can guide future training and incident management efforts.

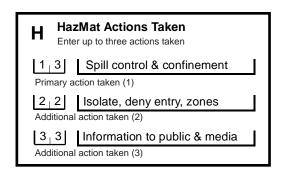
Entry

Enter the two-digit code and description for up to three significant HazMat actions taken.

- Significant non-HazMat actions taken should be entered in the Actions Taken section (F) of the Basic Module.
- If more than three significant HazMat actions were taken, the additional actions can be documented on the Basic Module.

Example

Flammable liquid from a semi-trailer was released. HazMat personnel controlled the spill (13), isolated the area (22), and released a statement to the media (33):



HAZMAT ACTIONS TAKEN CODES

Hazardous Condition

- 11 Identify, analyze hazardous materials.
- HazMat detection, monitoring, sampling, and analysis. Actions taken to detect, monitor, and sample hazardous materials using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.
- HazMat spill control and confinement. These are actions taken to confine the product release to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.
- HazMat leak control and containment. These are actions taken to keep a material within its container including plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.
- Remove hazard or hazardous materials. A broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.
- Decontaminate persons or equipment. Actions taken to prevent the spread of contaminants from the "hot zone" to the "cold zone." This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.

Isolation and Evacuation. Actions taken to isolate the contaminated area or evacuate those persons affected by a hazardous materials release or potential release.

- Determine the materials released to be non-hazardous through product identification and environmental monitoring.
- Isolate area and establish hazard control zones. Actions taken to isolate the affected area, deny entry to unprotected persons, and establish hazard control zones (hot, warm, cold).
- Provide apparatus. Actions taken to provide apparatus to conduct evacuation and isolation efforts.
- Provide equipment. Actions taken to provide equipment for evacuation and isolation efforts. Includes equipment provided to care for evacuees.
- 25 Provide water. Actions taken to provide water supply for exposure protection or fire control efforts.
- 26 Control crowd. Actions taken by fire department personnel to control crowds and onlookers.
- 27 Control traffic. Actions taken by fire department personnel to control traffic along evacuation routes.
- Protect in-place operations. Actions taken to protect civilians in their homes, schools, or places of work, without evacuating them from a potentially hazardous area.

Information, Investigation, and Enforcement. Actions taken to disseminate information about a hazardous materials incident for the purposes of notifying the public; requesting mutual aid from local, State, or Federal agencies; and conducting investigation or enforcement operations.

- Refer to proper authority. Actions taken to "hand off" the incident from emergency response personnel to cleanup crews or other agencies responsible for restoring the facility and environment to a pre-incident condition.
- Notify other agencies. Actions taken to ensure that other agencies are involved or notified of the incident so that they may provide assistance or fulfill their legally mandated responsibilities.
- Provide information to the public or media. Actions taken to provide information to the public through media resources or through alerting systems like the Emergency Broadcast System. Horns, klaxons, and other warning devices located at fixed facilities for evacuation purposes are included here.
- Investigate. Actions taken to investigate the cause of a hazardous materials release, identify the financially responsible party, and enable cost-recovery efforts.
- Standby. Actions taken to ensure that sufficient resources are on standby for possible use at a hazardous materials incident.
- HazMat actions taken, other. Any other actions taken during the course of a hazardous materials incident that are not identified on the Basic or HazMat Modules.

SECTION I

■ Release/Ignition Sequence

Definition

The indication of when a fire or explosion occurred in relation to the actual release of the hazardous material.

Purpose

Information on the causal relationship of the events occurring during a hazardous materials release can guide future training and incident management efforts.

Entry

Check or mark the Ignition box if a fire led to a release of hazardous materials. Check or mark the Release box if a hazardous material was spilled or released and then caught fire.

Example

An explosion and fire occurred following the spill of a flammable liquid (2):

If fire or explosion is involved with a release, which occurred first?

1 ☐ Ignition U ☐ Undetermined
2 ☒ Release

RELEASE/IGNITION SEQUENCE CODES

- 1 Ignition.
- 2 Release.
- U Undetermined.

SECTION J

■ Cause of Release ☆

Definition

The cause of the situation present at the time and location of the incident that caused the release or threatened release of a hazardous material.

Purpose

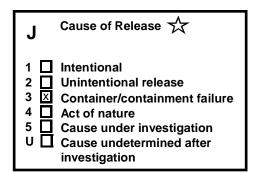
Information on the cause of release can guide prevention and enforcement efforts.

Entry

Check or mark the box that best describes the cause or reason for the release.

Example

The hazardous material was released from a rusted drum (3):



CAUSE OF RELEASE CODES

- 1 Intentional.
- 2 Unintentional release.
- 3 Container or containment failure.
- 4 Act of nature.
- 5 Cause under investigation.
- U Cause undetermined after investigation.

SECTION K

Factors Contributing to Release

Definition

Factors present at the time and location of the incident that contributed to the release or threatened release of a hazardous material.

Purpose

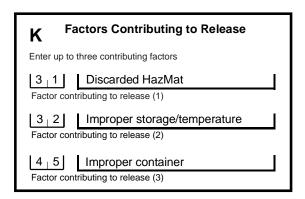
Information on factors contributing to the release can guide prevention and enforcement efforts.

Entry

Enter the two-digit codes and descriptions for up to three significant factors that contributed to the release or threatened release of the hazardous material.

Example

Hazardous materials were released from rusted drums (32) (45) at an illegal dump site (31):



FACTORS CONTRIBUTING TO RELEASE CODES

Failure To Control Hazardous Material. Factors where human failure to control the hazardous material contributed to a release or potential release.

- Abandoned or discarded hazardous material. Excludes falling asleep (33), impairment by drugs or alcohol (37), and other impairments (38).
- Failure to maintain the hazardous material within the proper storage or use temperature range.

- Failure to control the hazardous material due to a vehicle or process operator falling asleep.
- Inadequate control of hazardous materials. Includes improper transfer or overfilling of a container. Excludes accidental release due to improper container (45).
- Person possibly impaired by drugs or alcohol while controlling hazardous materials. Excludes people who simply fall asleep (33).
- Person otherwise impaired or unconscious. Includes mental or physical impairment. Excludes people who simply fall asleep (33).
- Failure to control hazardous materials, other. A human failure to control hazardous materials not classified below.

Misuse of Hazardous Materials

- Improper mixing technique. Includes mixing and compounding of chemicals. Excludes hazardous materials spills (34).
- 43 Hazardous materials used improperly. Includes chemicals used for the wrong purpose.
- 45 Improper container. Includes containers not designed for the hazardous material contained.
- 46 Improper movement of hazardous materials containers.
- 47 Improper storage procedures. Includes storage near heating equipment and moving parts.
- 48 Children playing with hazardous materials and having no knowledge of the dangers of hazardous materials.
- 49 Criminal Activity.
- 40 Misuse of hazardous materials, other.

Mechanical Failure, Malfunction. (Where there is human failure to control, classify in division 3.)

- 51 Automatic control failure.
- 52 Manual control failure.
- 53 Short circuit, ground fault.
- Other part failure, leak, or break.
- 55 Other electrical failure.
- Lack of maintenance, worn out. Includes failures to maintain hazardous materials handling equipment. Excludes short circuits and ground faults (53) and failure to clean (75).
- 50 Mechanical failure, malfunction, other.

Design, Construction, Installation Deficiency

- 61 Design deficiency. Includes structures and containers improperly designed for the specific hazardous material.
- 62 Construction deficiency. Includes improperly built structures and containers.
- Installation deficiency. Includes the improper installation of equipment for handling or processing hazardous materials.
- Design, construction, installation deficiency, other.

Operational Deficiency. (Where equipment was misused, classify in division 7; misuse of hazardous materials should be classified in division 4.)

- 71 Collision, overturn, knockdown. Includes automobiles and other vehicles.
- 72 Accidentally turned on, not turned off.
- 73 Equipment unattended.
- 74 Equipment overload.
- 75 Failure to clean equipment.
- 76 Improper startup, shutdown procedures.
- Fquipment used for purpose not intended. Excludes overloaded equipment (74).
- Fquipment not being operated properly. Includes situations where safety or control devices are bypassed.
- 70 Operational deficiency, other.

Natural Condition. (For use where the natural condition changed a normally safe operation into an unsafe one.)

- 81 High wind. Includes tornadoes and hurricanes.
- 82 Earthquake.
- 83 High water, flood.
- 84 Lightning.
- 85 Low humidity.
- 86 High humidity.
- 87 Low temperature.
- 88 High temperature.
- 80 Natural condition, other.

Special Release Factors

- 91 Animal.
- 92 Secondary release following previous release.
- 93 Reaction with other chemical.
- 97 Failure to use ordinary care under the circumstances, other than as classified above.
- 00 Factors contributing to release, other.
- UU Undetermined.

SECTION L

Factors Affecting Mitigation

Definition

Factors present at the time and location of the incident that affected the fire department's mitigation of the release or threatened release of a hazardous material.

Purpose

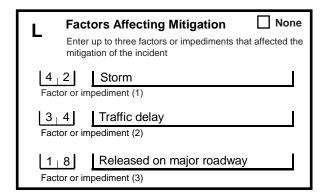
Information on factors affecting or impeding the mitigation of a release can guide training efforts, resource planning, incident management, and prevention efforts.

Entry

Enter the two-digit codes and descriptions for up to three significant factors that impeded or affected the mitigation of the release or threatened release of the hazardous material. If no factors affected the mitigation of the release, check or mark the None box.

Example

Flammable liquid was released from an overturned semi-trailer on an interstate highway (18) during rush hour (34) in a severe thunderstorm (42):



FACTORS AFFECTING MITIGATION CODES

Site Factors

- 11 Released into water table.
- 12 Released into sewer system.
- 13 Released into wildland/wetland area.
- 14 Released in residential area.

- 15 Released in occupied building.
- 16 Air release in confined area.
- 17 Released, slick on waterway.
- 18 Released on major roadway.
- 10 Site factors, other.

Release Factors

- 21 Release of extremely dangerous agent. Includes chemical or biohazard agent; population at risk.
- Threatened release of extremely dangerous agent. Includes chemical or biohazard agent; population at risk.
- 23 Combination of release and fire impeded mitigation of HazMat incident.
- 24 Multiple chemicals released, unknown potential effects.
- 25 Release of unidentified chemicals, unknown potential effects.
- 20 Release factors, other.

Impediment or Delay Factors

- 31 Access to release area.
- 32 HazMat apparatus unavailable.
- 33 HazMat apparatus failure.
- 34 Traffic delay.
- 35 Trouble finding location.
- 36 Communications delay.
- 37 HazMat-trained crew unavailable or delayed.
- 30 Impediment or delay factors, other.

Natural Conditions

- 41 High wind.
- 42 Storm.
- 43 High water. Includes floods.
- 44 Earthquake.
- 45 Extreme high temperature.
- 46 Extreme low temperature.
- 47 Ice or snow conditions.
- 48 Lightning.
- 49 Animal.
- 40 Natural conditions, other.
- 00 Factors affecting mitigation, other.
- NN None.

SECTION M

■ Equipment Involved in Release

Most of the Equipment Involved in Release codes were included in Equipment Involved in Ignition in NFIRS 4.1.

Equipment Type

Definition

The piece of equipment that either malfunctioned or, while working properly, allowed the release or threatened release of hazardous materials.

Purpose

Analysis of the equipment involved in a HazMat release is useful for improving product safety and preventive maintenance. It is just as important to know the kind of equipment that was used improperly as it is to know the kind of equipment that malfunctioned. Misuse can be the direct result of the way the equipment is designed and constructed. When involved in release, equipment information provides an important part of the causal data. Equipment involved in release can be compared to other causal data to determine if the equipment was (or was not) operating properly.

M

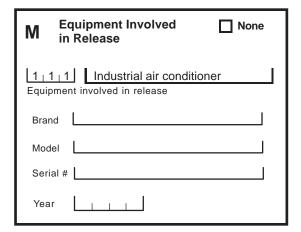
Entry

Enter the three-digit code and description that best describes the equipment involved in the release. If no equipment was involved, check or mark the None box.

• If a vehicle was involved in the release, use Section N.

Example

Refrigerant from a large commercial air conditioning unit was released (111):



An alphabetized synonym list for the following Equipment Involved in Release codes is presented in Appendix B.

EQUIPMENT INVOLVED IN RELEASE CODES

Heating, Ventilation, and Air Conditioning

- 111 Air conditioner.
- 112 Heat pump.
- 113 Fan.
- Humidifier, non-heat producing. Excludes heaters with built-in humidifiers (131, 132).
- 115 Ionizer.
- 116 Dehumidifier, portable.
- 117 Evaporative cooler, cooling tower.
- 121 Fireplace, masonry.
- 122 Fireplace, factory-built.
- 123 Fireplace, insert/stove.
- 124 Stove, heating.
- 125 Chimney connector, vent connector.
- 126 Chimney: brick, stone, masonry.
- 127 Chimney: metal. Includes stovepipes and flues.
- 120 Fireplace, chimney, other.
- 131 Furnace, local heating unit, built-in. Includes built-in humidifiers. Excludes process furnaces, kilns (353).
- Furnace, central heating unit. Includes built-in humidifiers. Excludes process furnaces, kilns. (353)
- Boiler (power, process, heating).
- Heater. Includes floor furnaces, wall heaters, and baseboard heaters. Excludes catalytic heaters (142), oil-filled heaters (143), hot water heaters (152).

- 142 Heater, catalytic.
- 143 Heater, oil-filled. Excludes kerosene heaters (141).
- 144 Heat lamp.
- 145 Heat tape.
- 151 Water heater. Includes sink-mounted instant hot water heaters and waterbed heaters.
- 152 Steam line, heat pipe, hot air duct. Includes radiators and hot water baseboard heaters.
- Heating, ventilation, and air conditioning, other.

Electrical Distribution, Lighting, and Power Transfer

- 211 Electrical power (utility) line. Excludes wires from the utility pole to the structure.
- 212 Electrical service supply wires; wires from utility pole to meter box.
- 213 Electric meter, meter box.
- 214 Electrical wiring from meter box to circuit breaker board, fuse box, or panel board.
- 215 Panel board (fuse); switchboard, circuit breaker board with or without ground-fault interrupter
- 216 Electrical branch circuit. Includes armored (metallic) cable, nonmetallic sheathing, or wire in conduit.
- Outlet, receptacle. Includes wall-type receptacles, electric dryer and stove receptacles.
- 218 Wall-type switch. Includes light switches.
- Ground-fault interrupter (GFI), portable, plug-in.
- 210 Electrical wiring, other.
- Transformer, distribution-type.
- Overcurrent, disconnect equipment. Excludes panel boards.
- Transformer, low-voltage (not more than 50 volts).
- 224 Generator.
- 225 Inverter.
- Uninterrupted power supply (UPS).
- 227 Surge protector.
- 228 Battery charger, rectifier.
- 229 Battery. Includes all battery types.
- Lamp: tabletop, floor, desk. Excludes halogen fixtures (235) and light bulbs (238).
- 232 Lantern, flashlight.
- 233 Incandescent lighting fixture.
- Fluorescent lighting fixture, ballast.
- 235 Halogen lighting fixture or lamp.
- Sodium, mercury vapor lighting fixture or lamp.
- 237 Portable or movable work light, trouble light.
- 238 Light bulb.
- 230 Lamp, lighting, other.
- 241 Night light.
- 242 Decorative lights, line voltage. Includes holiday lighting, Christmas lights.
- 243 Decorative or landscape lighting, low voltage.
- 244 Sign. Includes neon signs.
- Fence, electric.
- 252 Traffic control device
- 253 Lightning rod, arrester/grounding device.
- Power cord, plug; detachable from appliance.
- Power cord, plug; permanently attached to appliance.
- 263 Extension cord.
- 260 Cord, plug, other.
- 200 Electrical distribution, lighting, and power transfer, other.

Shop Tools and Industrial Equipment

- 311 Power saw.
- 312 Power lathe.
- 313 Power shaper, router, jointer, planer.
- 314 Power cutting tool.
- 315 Power drill, screwdriver.
- 316 Power sander, grinder, buffer, polisher.
- 317 Power hammer, jackhammer.
- 318 Power nail gun, stud driver, stapler.
- 310 Power tools, other.
- 321 Paint dipper.
- 322 Paint flow coating machine.
- 323 Paint mixing machine.
- 324 Paint sprayer.
- Coating machine. Includes asphalt-saturating and rubber-spreading machines.
- 320 Painting tools, other.
- Welding torch. Excludes cutting torches (332).
- Cutting torch. Excludes welding torches (331).
- Burners. Includes Bunsen burners, plumber furnaces, and blowtorches. Excludes weed burners (523).
- 334 Soldering equipment.
- 341 Air compressor.
- 342 Gas compressor.
- 343 Atomizing equipment. Excludes paint spraying equipment (324).
- Pump. Excludes pumps integrated with other types of equipment.
- 345 Wet/Dry vacuum (shop vacuum).
- 346 Hoist, lift, crane.
- Powered jacking equipment. Includes hydraulic rescue tools.
- 348 Drilling machinery or equipment. Includes water or gas drilling equipment.
- 340 Hydraulic equipment, other.
- 351 Heat-treating equipment.
- 352 Incinerator.
- 353 Industrial furnace, oven, kiln. Excludes ovens for cooking (646).
- 354 Tarpot, tar kettle.
- 355 Casting, molding, forging equipment.
- 356 Distilling equipment.
- 357 Digester, reactor.
- Extractor, waste recovery machine. Includes solvent extractors such as used in dry-cleaning operations and garnetting equipment.
- 361 Conveyor. Excludes agricultural conveyors (513).
- Power transfer equipment: ropes, cables, blocks, belts.
- 363 Power takeoff.
- 364 Powered valves.
- 365 Bearing or brake.
- Picking, carding, weaving machine. Includes cotton gins.
- 372 Testing equipment.
- Gas regulator. Includes propane, butane, LP, or natural gas regulators and flexible hose connectors to gas appliances.
- 374 Motor, separate. Includes bench motors. Excludes internal combustion motors (375).
- 375 Internal combustion engine (nonvehicular).
- 376 Printing press.
- 377 Car washing equipment.
- 300 Shop tools and industrial equipment, other.

Commercial and Medical Equipment

- Dental, medical, or other powered bed or chair. Includes powered wheelchairs.
- 412 Dental equipment, other.
- 413 Dialysis equipment.
- 414 Medical imaging equipment. Includes MRI, CAT scan, and ultrasound.
- 415 Medical monitoring equipment.
- 416 Oxygen administration equipment.
- 417 Radiological equipment, x-ray, radiation therapy.
- 418 Sterilizer, medical.
- Therapeutic equipment.
- 410 Medical equipment, other.
- 421 Transmitter.
- 422 Telephone switching gear, including PBX.
- TV monitor array. Includes control panels with multiple TV monitors and security monitoring stations. Excludes single TV monitor configurations (753).
- Studio-type TV camera. Includes professional studio television cameras. Excludes home camcorders and video equipment (756).
- 425 Studio-type sound recording/modulating equipment.
- 426 Radar equipment.
- 431 Amusement ride equipment.
- 432 Ski lift.
- 433 Elevator or lift.
- 434 Escalator.
- 441 Microfilm, microfiche viewing equipment.
- Photo processing equipment. Includes microfilm processing equipment.
- 443 Vending machine.
- 444 Nonvideo arcade game. Includes pinball machines and the like. Excludes electronic video games (755).
- 445 Water fountain, water cooler.
- 446 Telescope. Includes radio telescopes.
- 451 Electron microscope.
- 450 Laboratory equipment, other.
- 400 Commercial and medical equipment, other.

Garden Tools and Agricultural Equipment

- 511 Combine, threshing machine.
- Hay processing equipment.
- 513 Farm elevator or conveyor.
- 514 Silo loader, unloader, screw/sweep auger.
- 515 Feed grinder, mixer, blender.
- 516 Milking machine.
- 517 Pasteurizer. Includes milk pasteurizers.
- 518 Cream separator.
- 521 Sprayer, farm or garden.
- 522 Chain saw.
- 523 Weed burner.
- 524 Lawn mower.
- 525 Lawn, landscape trimmer, edger.
- 531 Lawn vacuum.
- 532 Leaf blower.
- 533 Mulcher, grinder, chipper. Includes leaf mulchers.
- 534 Snow blower, thrower.
- 535 Log splitter.
- 536 Post hole auger.

- 537 Post driver, pile driver.
- 538 Tiller, cultivator.
- Garden tools and agricultural equipment, other.

Kitchen and Cooking Equipment

- Blender, juicer, food processor, mixer.
- 612 Coffee grinder.
- 621 Can opener.
- 622 Knife.
- Knife sharpener.
- 631 Coffee maker or teapot.
- Food warmer, hot plate.
- 633 Kettle.
- 634 Popcorn popper.
- 635 Pressure cooker or canner.
- 636 Slow cooker.
- Toaster, toaster oven, countertop broiler.
- 638 Waffle iron, griddle.
- 639 Wok, frying pan, skillet.
- 641 Bread-making machine.
- 642 Deep fryer.
- 643 Grill, hibachi, barbecue.
- 644 Microwave oven.
- 645 Oven, rotisserie.
- Range with or without an oven or cooking surface. Includes counter-mounted stoves.
- Steam table, warming drawer/table.
- 651 Dishwasher.
- Freezer when separate from refrigerator.
- 653 Garbage disposer.
- 654 Grease hood/duct exhaust fan.
- 655 Ice maker (separate from refrigerator).
- 656 Refrigerator, refrigerator/freezer.
- 600 Kitchen and cooking equipment, other.

Electronic and Other Electrical Equipment

- 711 Computer. Includes devices such as hard drives and modems installed inside the computer casing. Excludes external storage devices (712).
- Computer storage device, external. Includes CD-ROM devices, tape drives, and disk drives. Excludes such devices when they are installed within a computer (711).
- 713 Computer modem, external. Includes digital, ISDN modems, cable modems, and modem racks. Excludes modems installed within a computer (711).
- 714 Computer monitor. Includes LCD or flat-screen monitors.
- 715 Computer printer. Includes multifunctional devices such as copier, fax, and scanner.
- 716 Computer projection device, LCD panel, projector.
- 710 Computer device, other.
- 721 Adding machine, calculator.
- 722 Telephone or answering machine.
- 723 Cash register.
- 724 Copier. Includes large standalone copiers. Excludes small copiers and multifunctional devices (715).
- 725 Fax machine.
- 726 Paper shredder.
- 727 Postage, shipping meter equipment.
- 728 Typewriter.

- 720 Office equipment, other.
- 731 Guitar.
- 732 Piano, organ. Includes player pianos. Excludes synthesizers and musical keyboards (733).
- 733 Musical synthesizer or keyboard. Excludes pianos, organs (732).
- 730 Musical instrument, other.
- 741 CD player (audio). Excludes computer CD, DVD players (712).
- 742 Laser disk player. Includes DVD players and recorders.
- 743 Radio. Excludes two-way radios (744).
- 744 Radio, two-way.
- 745 Record player, phonograph, turntable.
- 747 Speakers, audio; separate components.
- Stereo equipment. Includes receivers, amplifiers, equalizers. Excludes speakers (747).
- 749 Tape recorder or player.
- 740 Sound recording or receiving equipment, other.
- 751 Cable converter box.
- 752 Projector: film, slide, overhead.
- 753 Television.
- 754 VCR or VCR-TV combination.
- 755 Video game, electronic.
- 756 Camcorder, video camera.
- 757 Photographic camera and equipment. Includes digital cameras.
- 750 Video equipment, other.
- 700 Electronic equipment, other.

Personal and Household Equipment

- 811 Clothes dryer.
- 812 Trash compactor.
- Washer/Dryer combination (within one frame).
- Washing machine, clothes.
- 821 Hot tub, whirlpool, spa.
- 822 Swimming pool equipment.
- 830 Floor care equipment, other.
- 831 Broom, electric.
- 832 Carpet cleaning equipment. Includes rug shampooers.
- 833 Floor buffer, waxer, cleaner.
- 834 Vacuum cleaner.
- 841 Comb, hair brush.
- 842 Curling iron.
- 843 Electrolysis equipment.
- 844 Hair curler warmer.
- 845 Hair dryer.
- 846 Makeup mirror, lighted.
- 847 Razor, shaver (electric).
- 848 Suntan equipment, sunlamp.
- 849 Toothbrush (electric).
- Portable appliance designed to produce heat, other.
- Baby bottle warmer.
- 852 Blanket, electric.
- 853 Heating pad.
- 854 Clothes steamer.
- 855 Clothes iron.
- Automatic door opener. Excludes garage door openers (863).
- 862 Burglar alarm.
- 863 Garage door opener.

864 Gas detector. 865 Intercom. Smoke or heat detector, fire alarm. Includes control equipment. 866 868 Thermostat. 871 Ashtray. 872 Charcoal lighter, utility lighter. 873 Cigarette lighter, pipe lighter. 874 Fire-extinguishing equipment. Includes electronic controls. Insect trap. Includes bug zappers. 875 876 881 Model vehicles. Includes model airplanes, boats, rockets, and powered vehicles used for hobby and recreational purposes. 882 Toy, powered. 883 Woodburning kit. 891 Clock. 892 Gun. 893 Jewelry-cleaning machine. 894 Scissors. 895 Sewing machine. 896 Shoe polisher. 897 Sterilizer, non-medical. 800 Personal and household equipment, other.

Equipment Brand, Model, Serial Number, and Year

Equipment involved in release, other.

Other Equipment Involved in Release

Undetermined

None.

Definition

000

NNN

UUU

The information in this block precisely identifies the equipment that was involved in the HazMat release. As possible, the following information should be recorded:

Brand: The name by which the equipment is most commonly known.

Model: The model name or number assigned to the equipment by the manufacturer. If there is no specific model name or number, use the common physical description of the equipment.

Serial Number: The manufacturer's serial number that is generally stamped on an identification plate on the equipment.

Year: The year that the equipment was built.

Purpose

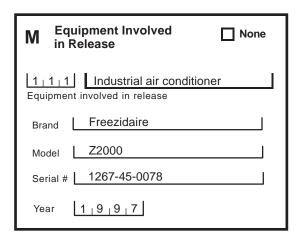
This element identifies specific types of equipment that failed or contributed to the release. This information can be used to determine whether particular brands or models cause problems more frequently than others; and to identify equipment for product recalls or in the development of new product safety codes.

Entry

Enter the brand, model, serial number, and year of the equipment involved in the release.

Example

The commercial air conditioner was a 1997 Freezidaire Model Z2000, serial number 1267–45–0078:



SECTION N

■ Mobile Property Involved in Release

Property Type

Definition

Property designed and constructed to be mobile, movable under its own power, or towed, such as an air-plane, automobile, boat, cargo trailer, farm vehicle, motorcycle, or recreational vehicle, that either failed or, while working properly, allowed the release or threatened release of hazardous materials.

Purpose

This information can guide prevention, enforcement, and product design efforts. Depending on State and local laws, specific documentation on mobile property involved in the release of a hazardous material may assist the fire department in collecting reimbursement from the responsible party for the expenses incurred in mitigating the hazardous materials incident.

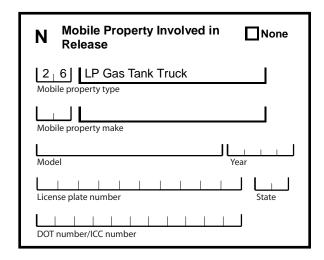
Entry

Enter the two-digit code and description of the type of mobile property. If no mobile property was involved, check or mark the None box.

Example

Flammable gas was released from a propane delivery truck (26):

Example on next page



Make, Model, Year, License Number, State, DOT/ICC Number Definitions

The information in this block precisely identifies the mobile property involved in a HazMat release. As possible, the following information should be recorded:

Make: The name of the manufacturer of the property.

Model: The manufacturer's model name. If one does not exist, use the physical description of the property that is commonly used to describe it, such as an "8,500-gallon tank truck."

Year: The year the property was manufactured.

License Plate Number (if any): The number on the license plates affixed to the vehicle; plates are generally issued by the State agency of motor vehicles. License numbers may also be available for boats, airplanes, and farm vehicles.

State: The State where the vehicle is licensed.

■ If a commercial vehicle that is involved in the incident is licensed in multiple States, record the State license where the release occurred. If no license exists for the State where the release occurred, use the State license of the vehicle's home origin.

DOT/ICC Number: The identification number assigned to the commercial carrier by either the Interstate Commerce Commission (ICC) or the Department of Transportation (DOT). It is generally stenciled on the vehicle or trailer.

Purpose

This element provides detailed information that identifies the specific types of mobile property involved in a hazardous materials release, which can be used to determine whether particular brands or models are more often a problem than others. Data on make, model, year, and other information are useful for determining compliance to standards of mobile properties and analyzing the effectiveness of these codes, standards, and regulations. The data also can be used to identify any special hazards.

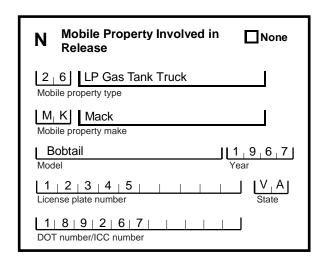
Entry

Enter the two-digit code and description of the property type. Enter the two-character code (from the list at the end of this section) and description of the property make. Enter the remaining information as appropriate. Be as specific as possible in making these entries.

■ Both the License Plate Number and DOT Number/ICC Number are left-justified in their fields.

Example

A release of LP gas from a 1967 Mack (MK) Bobtail tank truck occurred. The truck was licensed in Virginia (plate 12345) and was stenciled with a DOT number of 189267:



MOBILE PROPERTY TYPE CODES

Passenger Road Vehicles

- 11 Automobile, passenger car, ambulance, limousine, race car, taxicab.
- Bus, school bus. Includes "trackless" trolley buses.
- Off-road recreational vehicle. Includes dune buggies, golf carts, go-carts, snowmobiles. Excludes sport utility vehicles (11) and motorcycles (18).
- 14 Motor home (has own engine), camper mounted on pickup, bookmobile.
- 15 Trailer, travel; designed to be towed.
- 16 Trailer, camping; collapsible, designed to be towed.
- Mobile home, bank, classroom, or office (all designed to be towed), whether mounted on a chassis or on blocks for semipermanent use.
- Motorcycle, trail bike. Includes motor scooters and mopeds.
- 10 Passenger road vehicles, other.

Ν

Freight Road Transport Vehicles

- General use truck, dump truck, fire apparatus.
- Hauling rig (non-motorized), pickup truck.
- Trailer, semi; designed for freight (with or without tractor).
- 24 Tank truck, nonflammable cargo. Includes milk and water tankers, liquid nitrogen tankers.
- 25 Tank truck, flammable or combustible liquid, chemical cargo.
- 26 Tank truck, compressed gas or LP gas.
- Garbage, waste, refuse truck. Includes recyclable material collection trucks. Excludes roll-on-type trash containers (73).
- Freight road transport vehicles, other.

Rail Transport Vehicles

- 31 Diner car, passenger car.
- 32 Box, freight, or hopper car.
- 33 Tank car.
- Container or piggyback car (see 73 for container).
- 35 Engine/locomotive.
- 36 Rapid transit car, trolley (self-powered for use on track). Includes self-powered rail passenger vehicles.
- 37 Maintenance equipment car. Includes cabooses and cranes.
- 30 Rail transport vehicles, other.

Water Vessels

- Boat less than 65 ft (20 m) in length overall. Excludes commercial fishing vessels (48).
- Boat or ship equal to or greater than 65 ft (20 m) in length but less than 1,000 tons.
- Cruise liner or passenger ship equal to or greater than 1,000 tons.
- 44 Tank ship.
- Personal water craft. Includes one- or two-person recreational water craft.
- Cargo or military ship equal to or greater than 1,000 tons. Includes vessels not classified in 44 and 47.
- Non-self-propelled vessel. Includes all vessels without their own motive power, such as towed petroleum balloons, barges, and other towed or towable vessels. Excludes sailboats (49).
- 48 Commercial fishing or processing vessel. Includes shell fishing vessels.
- 49 Sailboats. Includes those with auxiliary power.
- 40 Water vessels, other.

Aircraft

- 51 Personal, business, utility aircraft less than 12,500 lb (5,670 kg) gross weight. Includes gliders.
- 52 Personal, business, utility aircraft equal to or greater than 12,500 lb (5,670 kg) gross weight.
- 53 Commercial aircraft: propeller-driven, fixed-wing. Includes turbo props.
- 54 Commercial aircraft: jet and other turbine-powered, fixed-wing.
- Helicopters, nonmilitary. Includes gyrocopters.
- Military fixed-wing aircraft. Includes bomber, fighter, patrol, vertical takeoff and landing (fixed-wing vertical stall) aircraft.
- 57 Military non-fixed-wing aircraft. Includes helicopters.
- Balloon vehicles. Includes hot air balloons and blimps.
- 50 Air, other.

Industrial, Agricultural, Construction Vehicles

- 61 Construction vehicle. Includes bulldozers, shovels, graders, scrapers, trenchers, plows, tunneling equipment, and road pavers.
- 63 Loader, industrial. Includes fork lifts, industrial tow motors, loaders, and stackers.
- 64 Crane.
- Agricultural vehicle, baler, chopper (farm use).
- Timber harvest vehicle. Includes skycars, loaders.
- 60 Industrial, construction, or agricultural vehicles, other.

Mobile Property, Miscellaneous

- Home, garden vehicle. Includes riding lawnmowers, snow removal vehicles, riding tractors. Excludes equipment where operator does not ride. See Equipment Involved in Ignition.
- 73 Shipping container, mechanically moved. Includes haulable trash containers, intermodal shipping containers.
- 74 Armored vehicle. Includes armored cars and military vehicles. Excludes armored aircraft and ships.
- 75 Missile, rocket, and space vehicles.
- 76 Aerial tramway vehicle.
- 00 Mobile property, other.
- NN No mobile property.

MOBILE PROPERTY MAKE CODES						
AC	Acura	IF	Infiniti		Peterbilt	
AR	Alfa Romeo	IN	International	PU	Peugeot	
AN	Antique Vehicle	IS	Isuzu	PI	Pierce	
AM	Aston Martin	IT	IT Italjet		Plymouth	
AT	ATK	IV	IV Iveco F		Pontiac	
AU	Audi	JA	JA Jaguar F		Porsche	
BE	Beta	JE	JE Jeep R		Range Rover	
BM	BMW	KA	(A Kawasaki I		Rogue (Ottowa)	
BL	Buell	KE	KE Kenworth		Rolls Royce	
BU	Buick	KI	Kia	SB	Saab	
CD	Cadillac	KT	KTM	SA	Saturn	
CP	Caterpillar	LR	Land Rover	SC	Scania	
CH	Chevrolet	LE	Lexus	SD	Simon Duplex	
CR	Chrysler	LI	Lincoln	ST	Sterling	
CV	Classic Vehicle	LO	Lotus	SU	Subaru	
CC	Crane Carrier (CCC)	MK	Mack	SZ	Suzuki	
DA	Daihatsu	ML	Maely	TO	Toyota	
DR	Diamond Reo	MA	Maico	TR	Triumph	
DO	Dodge	МН	Marmon	UD	UD	
DU	Ducati	MS	Maserati	UT	Utilmaster	
EA	Eagle	MZ	Mazda	VE	Vespa	
FE	Ferrari	MB	Mercedes Benz	VO	Volkswagen	
FO	Ford	MC	Mercury	VL	Volvo	
FR	Freightliner	MR	Merkur	VG	Volvo GMC	
FW	FWD	MT	Mitsubishi	WK	Walker	
GE	Geo	MO	Montesa	WL	Walter	
GM	GMC (General Motors)	MG	Moto Guzzi	WS	Western Star	
HD	Harley Davidson	MM	Moto Morini	WG	White GMC	
HI	Hino	NA	Navistar	YA	Yamaha	
НО	Honda	NI	I Nissan		Yugo	
HU	Husqvarna	OL	Oldsmobile	00	Other Make	
HY	Hyundai	os	Oshkosh			

SECTION 0

■ HazMat Disposition ☆

Definition

The fire department either completed the handling of the hazardous materials incident or the incident was released to another agency or to the property owner for completion.

Purpose

This element assists in understanding the extent to which the fire department is involved in resolving the incident and the frequency in which other agencies or contractors are used for incident mitigation.

Entry

Check or mark the box that best describes the final disposition of the incident by the fire department.

Example

The scene was released to a qualified cleanup contractor (7):

0	HazMat Disposition
2	Completed by fire service only Completed w/fire service present Released to local agency Released to county agency Released to state agency Released to federal agency Released to private agency Released to property owner or manager

HAZMAT DISPOSITION CODES

- 1 Completed by fire service only.
- 2 Completed with fire service present.
- 3 Released to local agency.
- 4 Released to county agency.
- 5 Released to State agency.
- Released to Federal agency.Released to private agency.
- 8 Released to property owner or manager.

SECTION P

HazMat Civilian Casualties

Definition

The number of civilians injured or killed, either as a result of a HazMat incident or the action of handling the HazMat incident. The term injury refers to physical damage to a person that requires either:

Treatment within 1 year of the incident by a practitioner of medicine,

OR

• At least 1 day of restricted activity immediately following the incident. An injured person is a casualty.

Purpose

The collection of information on the number of persons injured or killed as a result of their contact or exposure to hazardous materials that have been spilled or released can provide a concise measure of the scope of the human cost associated with hazardous materials incidents. This information can also be correlated with container types, transport conditions, actions taken, and other data to help understand how to reduce future HazMat injuries.

Entry

Identify and record separately the number of civilians injured and the number of civilians killed as a result of a HazMat incident.

- The optional EMS Module may be completed for all non-fire service persons injured or killed as a result of their contact or exposure to hazardous materials. The Civilian Fire Casualty Module should not be used for this purpose unless the release resulted in a fire and the civilians were injured as a result of the fire. The Fire Service Casualty Module should be completed for all fire service personnel injured or killed as a result of their contact or exposure to hazardous materials.
- HazMat civilian casualties should not be entered in Block H1 of the Basic Module.

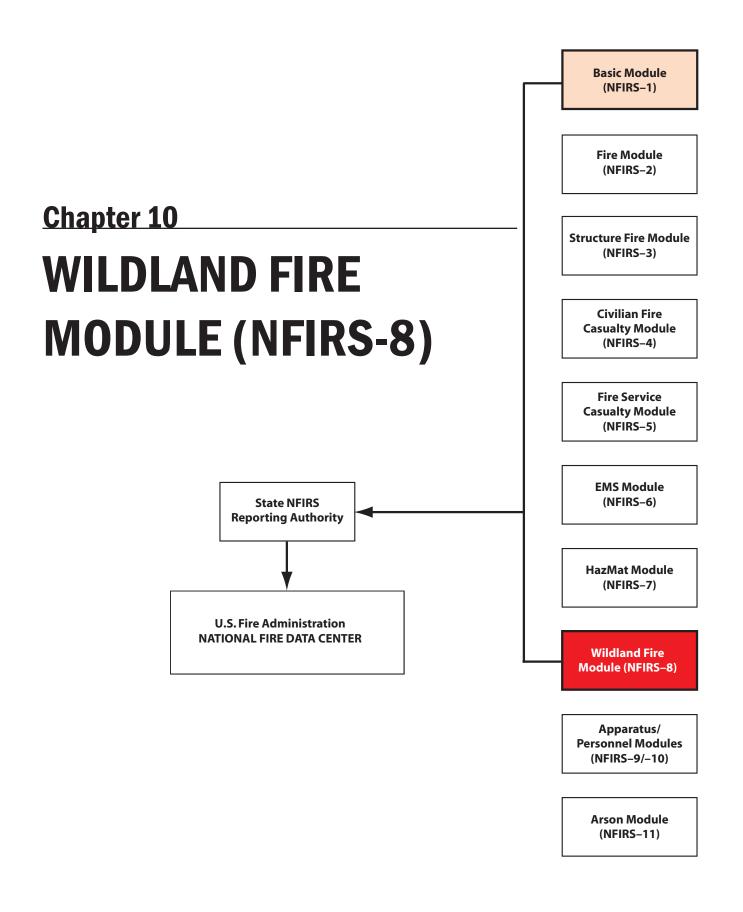
Example

One hundred civilians had varying degrees of nausea and dizziness as a result of the HazMat release:

P HazMat Civilian Casualties

Deaths Injuries

| 1,0,0



A MM DD Incident Date	YYYY Station Incident Number	Delete NFIRS-8 Wildland Fire
Enter Latitude/Longitude OR Township/Range/Section/Subsection Meridian if Section B on the Basic Module is not completed. 1 2 3 4 4 OR 5 North South Range West Township	☐ Equipment 0 ☐ Other ☐ Smoking U ☐ Undetermined ☐ Open/Outdoor fire ☐ Debris/Vegetation burn ☐ Structure (exposure)	Tactors Contributing None 1
Section Subsection Meridian C Area Type 1	□ Asleep □ Possibly impaired by alcohol or drugs □ Unattended person □ Possibly mentally disabled □ Physically disabled □ Multiple persons involved	F Mobile Property Type None G Equipment Involved None In Ignition
Weather Information NFDRS Weather Station ID Weather Type Wind Direction Wind Speed (mph) Air Temperature Check if negative Relative Humidity Fuel Moisture Fire Danger Rating	Number of Buildings Ignited None	Primary Crops Burned Identify up to 3 crops if any crops were burned. Crop 1 Crop 2 Crop 3
Indicate the percent of the total acres burned for each ownership type then check the ONE box to identify the property ownership at the origin of the fire. If the ownership at origin is Federal, enter the Federal Agency Code. Ownership % Total Acres Burned U Undetermined % Private 1 Tax paying % Public	K NFDRS Fuel Model at Origin Enter the code and the descriptor corresponding to the NFDRS Fuel Model at Origin. L1 Person Responsible for Fire 1 Identified person caused fire 2 Identified person caused fire 3 Fire not caused by person If person identified, complete the rest of Section L. L2 Gender of Person Involved 1 Male 2 Female	Type of Right-of-Way None Required if less than 100 feet.
3	Age or Date of Birth Age in Years Date of Birth OR Month Day Year L4 Activity of Person Involved Activity of Person Involved	Aspect Aspect Flame length Chains per Hour Rate of spread NFIRS-8 Revision 01/01/07

CHAPTER 10 WILDLAND FIRE MODULE (NFIRS-8)

Historically, NFIRS data have not proven useful in understanding the nature and magnitude of the wildland fire problem. The optional Wildland Fire Module, in conjunction with the Basic Module and other optional modules, attempts to rectify this problem by capturing data about the number of acres burned, the type of materials involved, the conditions that contributed to the ignition and spread of wildland fires, and the resources needed to control or extinguish them.

The purpose of the Wildland Fire Module is to document reportable wildland fires:

Reportable Wildland Fire: Any fire involving vegetative fuels, including a prescribed fire, that occurs in the wildland or urban-wildland interface areas, including those fires that threaten or consume structures.

Prescribed fires are included in this definition of reportable fires to better understand the role of fire in the wildland ecosystem.

In accordance with your State or local policy, the Wildland Fire Module may be used in place of the Fire Module (NFIRS-2) for the following Incident Type recorded on the Basic Module (Section C).

- 140 Natural Vegetation Fire, Other.
- 141 Forest, Woods, or Wildland Fire.
- 142 Brush, or Brush-and-Grass Mixture Fire.
- 143 Grass Fire.
- 160 Special Outside Fire, Other.
- 170 Cultivated Vegetation, Crop Fire, Other.
- 171 Cultivated Grain or Crop Fire.
- 172 Cultivated Orchard or Vineyard Fire.
- 173 Cultivated Trees or Nursery Stock Fire.
- 561 Unauthorized Burning.
- 631 Authorized Controlled Burning.
- 632 Prescribed Fire.
- A prescribed fire that escapes management is a hostile fire (Incident Type 141). A hostile fire cannot become a prescribed fire, but the management strategy (actions taken) may change.

Definitions

For the purpose of wildland fire reporting, the following definitions are used:

Prescribed Fire: Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist prior to ignition.

Α

Urban-Wildland Interface Area: The geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

Urban-Wildland Interface Fire: Any fire, other than a prescribed fire, where fire suppression tactics were influenced by a geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

Wildland Fire: Any fire involving vegetative fuels, other than a prescribed fire, that occurs in the wildland. A wildland fire may expose and possibly consume structures (Incident Type 141).

Wildland: An area where development is essentially nonexistent, except for roads, railroads, power lines, and similar facilities.

The Wildland Fire Module permits wildland fires to be profiled in detail for resource allocation, incident management, and fire impact analysis.

SECTION A

The guidance and directions for completing Section A of the Wildland Fire Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Wildland Fire Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date A

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🖈

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number \$\text{\$\frac{1}{2}}\$

Entry

If this report is for an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition

Indicates a change to information submitted on a previous Wildland Fire Module or a deletion of all information regarding the incident.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this wildland incident and now want to have the data on this incident deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Alternate Location Specification

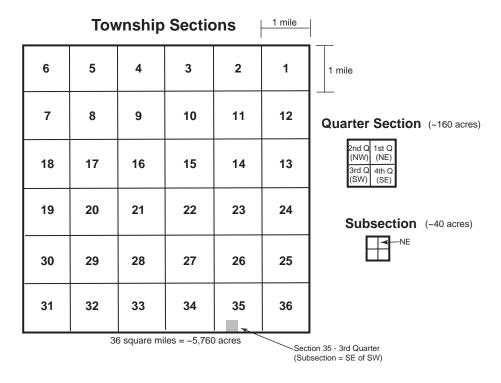
- Enter either latitude/longitude or section/township/range/subsection/meridian location information. Do not enter both.
- To use this addressing feature, the alternate address box on the Basic Module (Section B) must be checked or marked.

Definition

The location of the wildland fire. This block documents the geographical location of the wildland fire and is used in place of Section B of the Basic Module when traditional addressing methods are not suitable.

Latitude and Longitude: Angular coordinates measured with respect to the center of the Earth. The value is expressed in degrees and minutes. Valid inputs for Latitude are in the range -90 to 90 (north is positive). Valid inputs for Longitude are in the range -180 to 180 (east is positive).

Township: Consists of 36 sections arranged in a six-by-six array, measuring 6 miles by 6 miles. Sections are numbered beginning with the northeast-most section, proceeding west to 6, then south along the west edge of the township and to the east. This array is depicted below:



The last digit (decimal point) in this field denotes quarter Townships represented by the following coding:

3 1st Quarter 7 3rd Quarter 5 2nd Quarter 0 4th Quarter

Range: Assigned to a township by measuring east or west of a principal meridian.

Section: Basic unit of the system, a square tract of line 1 mile by 1 mile containing 640 acres.

Subsection: Within each section, the land is referred to as half and quarter sections. A one-sixteenth division is called a subsection (sometimes referred to as a quarter of a quarter). A valid entry is one of the following 16 possibilities:

SUBSECTION CODES						
NENE	Northeast of northeast	NWNE	Northwest of northeast			
NENW	Northeast of northwest	NWNW	Northwest of northwest			
NESE	Northeast of southeast	NWSE	Northwest of southeast			
NESW	Northeast of southwest	NWSW	Northwest of southwest			
SENE	Southeast of northeast	SWNE	Southwest of northeast			
SENW	Southeast of northwest	SWNW	Southwest of northwest			
SESE	Southeast of southeast	SWSE	Southwest of southeast			
SESW	Southeast of southwest	SWSW	Southwest of southwest			

• In some regions, the term subsection is not used. Thus, it is permissible to leave this field blank.

Principal Meridian: Reference or beginning point for measuring east or west ranges.

MERIDIAN CODES					
01	First Principal	17	Indian	33	Willamette
02	Second Principal	18	Louisiana	34	Wind River
03	Third Principal	19	Michigan	35	Ohio
04	Fourth Principal	20	Principal	36	Great Miami River
05	Fifth Principal	21	Mt. Diablo	37	Muskingum River
06	Sixth Principal	22	Navajo	38	Ohio River
07	Black Hills	23	New Mexico	39	First Scioto River
08	Boise	24	St. Helena	40	Second Scioto River
09	Chickasaw	25	St. Stephens	41	Third Scioto River
10	Choctaw	26	Salt Lake	42	Ellicotts Line
11	Cimarron	27	San Bernardino	43	12 Mile Square
12	Copper River	28	Seward	44	Kateel River
13	Fairbanks	29	Tallahassee	45	Umiat
14	Gila and Salt River	30	Uintah	UU	Undetermined
15	Humboldt	31	Ute		
16	Huntsville	32	Washington		

Purpose

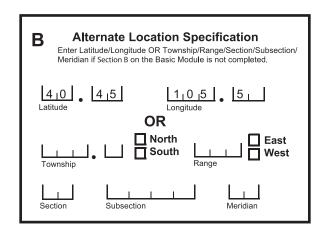
This information may be of value to local authorities for contacting the owner in connection with the fire and in making a long-term analysis of wildland fires in similar areas or on property under the same ownership.

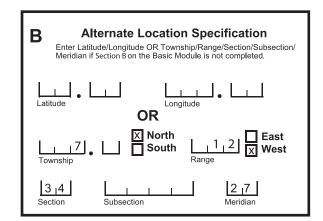
Entry

Enter the alternate location information using the specific Latitude and Longitude where the fire started or, alternatively, enter the Section, Township, Range, and Meridian.

Example

The wildland fire (1) occurred in Fort Collins, Colorado, at a latitude of 40°45' N and longitude of 105°5' W; or (2) was located on John Wayne's boyhood family farm in California located at Section 34, Township 7N, Range 12W, San Bernardino (27) Meridian:





SECTION C

OR

Area Type

Definition

A general description of the area where the wildland fire occurred.

Purpose

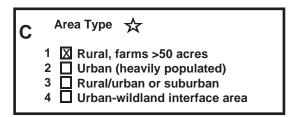
Aggregate information on the areas where wildland fires occur helps determine the level of risk from fires in densely populated areas versus those in rural areas. This field also documents fires occurring in urban-wildland interface areas.

Entry

Check or mark the box that best describes the area type where the wildland fire occurred.

Example

The wildland fire occurred on a 100-acre farm in a rural area (1):



AREA TYPE CODES

- Rural, open fields, forests, or cultivated land greater than 50 acres that is located away from any concentrated housing areas.
- 2 Urban, cities, or heavily populated areas.
- Rural/Urban or suburban. Includes a predominantly residential area outlying an urban area. May include small open fields, forests, and cultivated land.
- 4 Urban-wildland interface area. Includes geographical area where structures and other human development meets or intermingles with wildland/vegetative fuels.

SECTION D

This section collects information on the factors and causes of the fire's ignition, and what conditions may have affected fire suppression efforts.

■ Wildland Fire Cause ☆

Definition

This block provides for the broadest classification of ignition causes consistent with the "General Fire Causes" adopted by the National Wildfire Coordinating Group (NWCG).

Purpose

The primary use of this information is to distinguish between human- and nature-caused wildland fires.

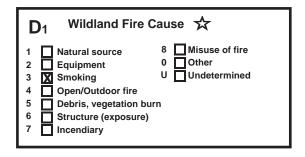
Entry

Check or mark the box that best describes the cause of the wildland fire.

Wildland Fire Cause is a critical data element, and it is important to complete the additional blocks in this module to provide a better understanding of how and why the fire started.

Example

A discarded cigarette (3) started the wildland fire:



WILDLAND FIRE CAUSE CODES

- 1 Natural source.
- 2 Equipment.
- 3 Smoking.
- 4 Open/Outdoor fire.
- 5 Debris, vegetation burn.
- 6 Structure (exposure).
- 7 Incendiary.
- 8 Misuse of fire.
- 0 Wildland fire cause, other.
- U Undetermined.

Human Factors Contributing to Ignition

Definition

The human condition or situation that allowed the heat source and combustible material to combine to ignite the fire.

Purpose

Combined with Wildland Fire Cause and Factors Contributing to Ignition, this element explains how and why the fire started. The data element Age Was a Factor is particularly useful in tracking juvenile firesetter trends when used in combination with Gender of Person Involved (Block L2) and Age or Date of Birth (Block L3). It can also indicate whether a fire is potentially preventable through public education or other strategies.

Entry

Check or mark the boxes that best describe any human factors that contributed to the ignition of the wildland fire. Multiple factors can be selected. If human factors were not involved or cannot be determined, check or mark the None box only.

Example

The camper fell asleep (1) after starting a campfire that went out of control:

D₂ Human Factors Contributing to Ignition ★	None
Check as many boxes as are applicable	
1	or drugs

HUMAN FACTORS CONTRIBUTING TO IGNITION CODES

- 1 Asleep. Includes fires that result from a person falling asleep while smoking.
- Possibly impaired by alcohol or drugs. Includes people who fall asleep or act recklessly or carelessly as a result of drugs or alcohol. Excludes people who simply fall asleep (1).
- Unattended or unsupervised person. Includes "latch key" situations whether the person involved is young or old and situations where the person involved lacked supervision or care.
- 4 Possibly mentally disabled. Excludes impairments of a temporary nature such as those caused by drugs or alcohol (2).
- 5 Physically disabled.
- 6 Multiple persons involved. Includes gang activity.
- 7 Age was a factor.
- N None.

■ Factors Contributing to Ignition ☆

Factors Contributing to Ignition was known as Ignition Factors in NFIRS 4.1.

Definition

The contributing factors that allowed the heat source and combustible material to combine to ignite the fire.

Purpose

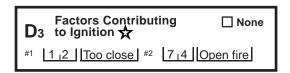
When used in conjunction with other elements such as Wildland Fire Cause, Equipment Involved in Ignition, Heat Source, and Human Factors, this element explains how and why the fire started. The analysis of how these elements interact provides valuable information to guide and direct fire prevention and fire safety education programs.

Entry

Enter the two-digit code and description for up to two factors that contributed to the ignition of the wild-land fire. The primary factor should be entered first. If it is known that no factors contributed to ignition, check or mark the None box only; if uncertain, leave the block blank.

Example

The campers placed their trash bag too close to the cooking fire (12 and 74):



FACTORS CONTRIBUTING TO IGNITION CODES

Misuse of Material or Product

- Abandoned or discarded materials or products. Includes discarded cigarettes, cigars, tobacco embers, hot ashes, or other burning matter. Excludes outside fires left unattended.
- 12 Heat source too close to combustibles.
- Cutting, welding too close to combustibles.

- D
- Flammable liquid or gas spilled. Excludes improper fueling technique (15) and release due to improper container (18).
- Improper fueling technique. Includes overfueling, failure to ground. Excludes fuel spills (14) and using the improper fuel (27).
- 16 Flammable liquid used to kindle fire.
- Washing part or material, painting with flammable liquid.
- Improper container or storage procedure. Includes gasoline in unimproved containers, gas containers stored at excessive temperature, and storage conditions that lead to spontaneous ignition.
- 19 Playing with heat source. Includes playing with matches, candles, and lighters and bringing combustibles into a heat source.
- 10 Misuse of material or product, other.

Mechanical Failure, Malfunction

- 21 Automatic control failure.
- 22 Manual control failure.
- 23 Leak or break. Includes leaks or breaks of containers or pipes. Excludes operational deficiencies and spill mishaps.
- Worn out.
- Backfire. Excludes fires originating as a result of hot catalytic converters (41).
- 27 Improper fuel used. Includes the use of gasoline in a kerosene heater and the like.
- 20 Mechanical failure, malfunction, other.

Electrical Failure, Malfunction

- 31 Water-caused short-circuit arc.
- 32 Short-circuit arc from mechanical damage.
- 33 Short-circuit arc from defective, worn insulation.
- 34 Unspecified short-circuit arc.
- 35 Arc from faulty contact, broken conductor. Includes broken power lines and loose connections.
- 36 Arc, spark from operating equipment, switch, or electric fence.
- 37 Fluorescent light ballast.
- 30 Electrical failure, malfunction, other.

Design, Manufacturing, Installation Deficiency

- 41 Design deficiency.
- 42 Construction deficiency.
- 43 Installation deficiency.
- 44 Manufacturing deficiency.
- Design, manufacturing, installation deficiency, other.

Operational Deficiency

- 51 Collision, knock down, run over, turn over. Includes automobiles and other vehicles.
- 52 Accidentally turned on, not turned off.
- 53 Equipment unattended.
- 54 Equipment overloaded.
- Failure to clean. Includes lint and grease buildups in chimneys, stove pipes.
- 56 Improper startup/shutdown procedure.
- 57 Equipment not used for purpose intended. Excludes overloaded equipment (54).
- 58 Equipment not operated properly.
- 50 Operational deficiency, other.

Natural Condition

- 61 High wind.
- 62 Storm.

- 63 High water, including floods.
- 64 Earthquake.
- 65 Volcanic action.
- 66 Animal.
- 60 Natural condition, other.

Fire Spread or Control

- 71 Exposure fire.
- 72 Rekindle.
- Outside/Open fire for debris or waste disposal.
- 74 Outside/Open fire for warming or cooking.
- 75 Agriculture or land management burns. Includes prescribed burns.
- 70 Fire spread or control, other.

Other Human Factors Contributing to Ignition

- Human factors contributing to ignition, other.
- NN None.
- UU Undetermined.

Fire Suppression Factors

Definition

Factors that contributed to the growth, spread, or suppression of the fire. This is used to report incident information that directly impacted the ignition, spread of fire, incident complexity, or presence of hazardous conditions.

Purpose

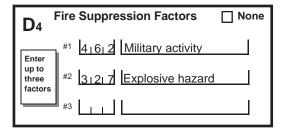
Fire suppression factors provide essential guides for planning strategic and tactical procedures for future incidents, as well as for identifying fire training and equipment needs.

Entry

Enter the three-digit code and description for up to three fire suppression factors or conditions that constituted a significant fire suppression problem or affected how the fire was managed. If no factors were involved in the fire suppression effort, check or mark the None box.

Example

A large brush fire was burning on a military installation (462) in an area where unexploded munitions (327) could be encountered. The incident commander decided the best course of action was to allow the fire to burn but to establish a control line outside the perimeter of the installation:



FIRE SUPPRESSION FACTORS CODES

Building Construction or Design

- 112 Roof collapse.
- 113 Roof assembly combustible.
- 121 Ceiling collapse.
- 125 Holes or openings in walls or ceilings.
- 131 Wall collapse.
- 132 Difficult to ventilate.
- 134 Combustible interior finish.
- 137 Balloon construction.
- 138 Internal arrangement of partitions.
- 139 Internal arrangement of stock or contents.
- 141 Floor collapse.
- 151 Lack of fire barrier walls or doors.
- 153 Transoms.
- 161 Attic undivided.
- 166 Insulation combustible.
- 173 Stairwell not enclosed.
- 174 Elevator shaft.
- 175 Dumbwaiter.
- 176 Duct, vertical.
- 177 Chute: rubbish, garbage, laundry.
- 181 Supports unprotected.
- 182 Composite plywood I-beam construction.
- 183 Composite roof/floor sheathing construction.
- 185 Wood truss construction.
- 186 Metal truss construction.
- Fixed burglar protection assemblies (bars, grills on windows or doors).
- 188 Quick release failure of bars on windows or doors.
- 192 Previously damaged by fire.
- Building construction or design, other.

Act or Omission

- 213 Doors left open or outside door unsecured.
- Fire doors blocked or did not close properly.
- Violation of applicable or locally adopted fire, building, or life safety code.
- 222 Illegal and clandestine drug operation.
- 232 Intoxication, drugs or alcohol.
- 253 Riot or civil disturbance. Includes hostile acts.
- 254 Person(s) interfered with operations.
- Accelerant used.
- 200 Act or omission, other.

On-Site Materials

- 311 Aisles blocked or improper width.
- 312 Significant and unusual fuel load from structure components.
- 313 Significant and unusual fuel load from contents of structure.
- 314 Significant and unusual fuel load outside from natural environment conditions.
- 315 Significant and unusual fuel load from man-made condition.
- 316 Storage, improper.
- 321 Radiological hazard onsite.
- 322 Biological hazard onsite.

- 323 Cryogenic hazard onsite.
- 324 Hazardous chemical, corrosive material, or oxidizer.
- 325 Flammable/Combustible liquid hazard.
- 327 Explosives hazard present.
- 331 Decorations. Includes crepe paper, garland.
- Natural or other lighter-than-air gas present.
- 342 Liquefied petroleum (LPG) or other heavier-than-air gas present.
- Combustible storage >12 ft to top of storage. Excludes rack storage (362).
- 362 High rack storage.
- 300 On-site materials, other.

Delays

- Delayed detection of fire.
- Delayed reporting of fire. Includes occupants investigating the source of the alarm or smoke before calling the fire department.
- 413 Alarm system malfunction.
- 414 Alarm system shut off for valid reason. Includes systems being maintained or repaired.
- 415 Alarm system inappropriately shut off.
- 421 Unable to contact fire department. Includes use of wrong phone number and cellular mobile phone problems.
- 424 Information incomplete or incorrect.
- 425 Communications problem; system failure of local, public, or other telephone network.
- 431 Blocked or obstructed roadway. Includes blockages due to construction or illegal parking.
- Poor or no access for fire department apparatus.
- 435 Traffic delay.
- 436 Trouble finding location.
- Size, height, or other building characteristic delayed access to fire.
- 438 Power lines down/arcing.
- 443 Poor access for firefighters.
- 444 Secured area.
- 445 Guard dogs.
- 446 Aggressive animals. Excludes guard dogs (445).
- 447 Suppression delayed due to evaluation of hazardous or unknown materials at incident scene.
- 448 Locked or jammed doors.
- 451 Apparatus failure before arrival at incident.
- 452 Hydrants inoperative.
- 461 Airspace restriction.
- 462 Military activity.
- 481 Closest apparatus unavailable.
- 400 Delays, other.

Protective Equipment

- Automatic fire suppression system problem. Includes system failures, shutoffs, inadequate protection to cover hazard, and the like.
- Automatic sprinkler or standpipe/fire department connection problem. Includes damage, blockage, failure, improper installation.
- Water supply inadequate: private.
- Water supply inadequate: public.
- 543 Electrical power outage.
- Failure of rated fire protection assembly. Includes fire doors, fire walls, floor/ceiling assemblies, and the like.
- Protective equipment negated illegally or irresponsibly. Includes fire doors, dampers, sprinklers, and the like.
- 500 Protective equipment, other.

Egress/Exit Problems

- Occupancy load above legal limit.
- Evacuation activity impeded fire department access.
- Window type impeded egress. Includes windows too small.
- 614 Windowless wall.
- 621 Young occupants.
- 622 Elderly occupants
- Physically disabled occupants.
- 624 Mentally disabled occupants.
- Physically restrained/confined occupants.
- 626 Medically disabled occupants.
- 641 Special event.
- 642 Public gathering.
- 600 Egress/Exit problems, other.

Natural Conditions

- 711 Drought or low fuel moisture.
- 712 Humidity, low.
- 713 Humidity, high.
- 714 Temperature, low.
- 715 Temperature, high.
- 721 Fog.
- 722 Flooding.
- 723 Ice.
- 724 Rain.
- 725 Snow.
- 732 Wind. Includes hurricanes and tornados.
- 741 Earthquake.
- 760 Unusual vegetation fuel loading.
- 771 Threatened or endangered species.
- 772 Timber sale activity.
- 773 Fire restriction.
- Historic disturbance (past fire history can dictate fire behavior).
- 775 Urban-wildland interface area.
- 700 Natural conditions, other.

Other Fire Suppression Factors

000 Fire suppression factors, other.

NNN None.

SECTION E

■ Heat Source ☆

 ■ Heat Source was known as Form of Heat of Ignition in NFIRS 4.1.

Definition

The specific source of the heat energy that started the fire.

Purpose

This information, combined with other factors in the ignition sequence, permits analysis of how fires start. Also, some heat sources (e.g., cigarettes, lighters) are objects whose frequency of involvement in fires is of direct interest for fire prevention efforts.



Entry

Enter the two-digit code and description that best describes the heat source that ignited the fire.

Example

A discarded cigarette (61) ignited the brush, resulting in a wildland fire:



HEAT SOURCE CODES

Operating Equipment

- Spark, ember, or flame from operating equipment.
- 12 Radiated or conducted heat from operating equipment.
- 13 Electrical arcing.
- 10 Heat from operating equipment, other.

Hot or Smoldering Object

- Heat, spark from friction. Includes overheated tires.
- Molten, hot material. Includes molten metal, hot forging, hot glass, hot metal fragment, brake shoe, hot box, and slag from arc welding operations.
- Hot ember or ash. Includes hot coals, coke, and charcoal; and sparks or embers from a chimney that ignite the roof of the same structure. Excludes flying brand, embers, and sparks (83); and embers accidentally escaping from operating equipment (11).
- 40 Hot or smoldering object, other.

Explosives, Fireworks

- Munitions. Includes bombs, ammunition, and military rockets.
- Blasting agent, primer cord, black powder fuse. Includes fertilizing agents, ammonium nitrate, and sodium, potassium, or other chemical agents.
- Fireworks. Includes sparklers, paper caps, party poppers, and firecrackers.
- 55 Model and amateur rockets.
- 56 Incendiary device. Includes Molotov cocktails and arson sets.
- 50 Explosive, fireworks, other.

Other Open Flame or Smoking Materials

- 61 Cigarette.
- 62 Pipe or cigar.
- 63 Heat from undetermined smoking material.
- 64 Match.
- 65 Lighter: cigarette lighter, cigar lighter.
- 66 Candle.
- Warning or road flare; fusee.
- 68 Backfire from internal combustion engine. Excludes flames and sparks from an exhaust system (11).
- 69 Flame/Torch used for lighting. Includes gas light and gas-/liquid-fueled lantern.
- Heat from open flame or smoking materials, other.

F

Chemical, Natural Heat Sources

- 71 Sunlight. Usually magnified through glass, bottles, etc.
- 72 Spontaneous combustion, chemical reaction.
- 73 Lightning discharge.
- Other static discharge. Excludes electrical arcs (13) or sparks (11).
- 70 Chemical, natural heat sources, other.

Heat Spread From Another Fire. Excludes operating equipment.

- Heat from direct flame, convection currents spreading from another fire.
- Radiated heat from another fire. Excludes heat from exhaust systems of fuel-fired, fuel-powered equipment (12).
- Flying brand, ember, spark. Excludes embers, sparks from a chimney igniting the roof of the same structure (43).
- 84 Conducted heat from another fire.
- 80 Heat spread from another fire, other.

Other Heat Sources

- Multiple heat sources, including multiple ignitions. If one type of heat source was primarily involved, use that classification.
- 00 Heat sources, other.
- UU Undetermined.

SECTION F

Mobile Property Type

Definition

Property that is designed and constructed to be mobile, movable under its own power, or towed, such as an airplane, automobile, boat, cargo trailer, farm vehicle, motorcycle, or recreation vehicle.

Purpose

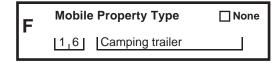
This data element provides detailed information to identify the specific types of mobile property involved in an incident. The data also can be used to see if the public needs to be alerted to special hazards.

Entry

If the mobile property type started the fire, but did not burn itself, enter the two-digit code and description that best describes the mobile property type. If no mobile property started the fire, check or mark the None box.

Example

A camping trailer (16) caught fire and spread to the surrounding brush:



MOBILE PROPERTY TYPE CODES

Passenger Road Vehicles

- Automobile, passenger car, ambulance, limousine, race car, taxicab.
- Bus, school bus. Includes "trackless" trolley buses.
- Off-road recreational vehicle. Includes dune buggies, golf carts, go-carts, snowmobiles. Excludes sport utility vehicles (11) and motorcycles (18).
- Motor home (has own engine), camper mounted on pickup, bookmobile.
- 15 Trailer, travel; designed to be towed.
- 16 Trailer, camping; collapsible, designed to be towed.
- Mobile home, bank, classroom, or office (all designed to be towed), whether mounted on a chassis or on blocks for semipermanent use.
- Motorcycle, trail bike. Includes motor scooters and mopeds.
- 10 Passenger road vehicles, other.

Freight Road Vehicles

- General use truck, dump truck, fire apparatus.
- Hauling rig (non-motorized), pickup truck.
- Trailer, semi; designed for freight (with or without tractor).
- 24 Tank truck, nonflammable cargo. Includes milk and water tankers, liquid nitrogen tankers.
- Tank truck, flammable or combustible liquid, chemical cargo.
- Tank truck, compressed gas or LP gas.
- Garbage, waste, refuse truck. Includes recyclable material collection trucks. Excludes roll-on-type trash containers (73).
- Freight road transport vehicles, other.

Rail Transport Vehicles

- 31 Diner car, passenger car.
- 32 Box, freight, or hopper car.
- 33 Tank car.
- Container or piggyback car (see 73 for container).
- 35 Engine/locomotive.
- Rapid transit car, trolley (self-powered for use on track). Includes self-powered rail passenger vehicles.
- 37 Maintenance equipment car. Includes cabooses and cranes.
- 30 Rail transport vehicles, other.

Water Vessels

- Boat less than 65 ft (20 m) in length overall. Excludes commercial fishing vessels (48).
- Boat or ship equal to or greater than 65 ft (20 m) in length but less than 1,000 tons.
- 43 Cruise liner or passenger ship equal to or greater than 1,000 tons.
- 44 Tank ship.
- 45 Personal water craft. Includes one- or two-person recreational water craft.
- 46 Cargo or military ship equal to or greater than 1,000 tons. Includes vessels not classified in 44 and 47.
- Non-self-propelled vessel. Includes all vessels without their own motive power, such as towed petroleum balloons, barges, and other towed or towable vessels. Excludes sailboats (49).
- 48 Commercial fishing or processing vessel. Includes shell fishing vessels.
- 49 Sailboats. Includes those with auxiliary power.
- 40 Water transport vessels, other.

Aircraft

- Personal, business, utility aircraft less than 12,500 lb (5,670 kg) gross weight. Includes gliders.
- Personal, business, utility aircraft equal to or greater than 12,500 lb (5,670 kg) gross weight.

- 53 Commercial aircraft: propeller-driven, fixed-wing. Includes turbo props.
- 54 Commercial aircraft: jet and other turbine-powered, fixed-wing.
- Helicopters, nonmilitary. Includes gyrocopters.
- Military fixed-wing aircraft. Includes bomber, fighter, patrol, vertical takeoff and landing (fixed-wing vertical stall) aircraft.
- 57 Military non-fixed-wing aircraft. Includes helicopters.
- Balloon vehicles. Includes hot air balloons and blimps.
- 50 Air transport vehicles, other.

Industrial, Agricultural, Construction Vehicles

- Construction vehicle. Includes bulldozers, shovels, graders, scrapers, trenchers, plows, tunneling equipment, and road pavers.
- 63 Loader, industrial. Includes fork lifts, industrial tow motors, loaders, and stackers.
- 64 Crane
- Agricultural vehicle, baler, chopper (farm use).
- Timber harvest vehicle. Includes skycars, loaders.
- 60 Industrial, construction, or agricultural vehicles, other.

Mobile Property, Miscellaneous

- Home, garden vehicle. Includes riding lawnmowers, snow removal vehicles, riding tractors. Excludes equipment where operator does not ride. See Equipment Involved in Ignition.
- 73 Shipping container, mechanically moved. Includes haulable trash containers, intermodal shipping containers.
- 74 Armored vehicle. Includes armored cars and military vehicles. Excludes armored aircraft and ships.
- 75 Missile, rocket, and space vehicles.
- 76 Aerial tramway vehicle.
- 00 Mobile property, other.
- NN No mobile property.

SECTION G

Equipment Involved in Ignition

Definition

The piece of equipment that provided the principal heat source to cause the ignition if the equipment malfunctioned or was used improperly.

Purpose

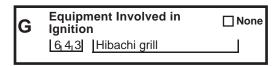
Analysis of the equipment involved in ignition is useful for improving product safety and preventive maintenance. It is just as important to know the kind of equipment that was used improperly as it is to know the kind of equipment that malfunctioned. Misuse can be the direct result of the way the equipment is designed and constructed. When involved in ignition, equipment information provides an important part of the causal data. Equipment involved in ignition can be compared to other casual data to determine if the equipment was (or was not) operating properly.

Entry

Enter the three-digit code and description that best describes the equipment involved in ignition. If no equipment was involved in ignition, check or mark the None box.

Example

The fire was started by an overturned hibachi grill (643):



An alphabetized synonym list for the following Equipment Involved in Ignition codes is presented in Appendix B.

EQUIPMENT INVOLVED IN IGNITION CODES

Heating, Ventilation, and Air Conditioning

- 111 Air conditioner.
- Heat pump.
- 113 Fan.
- Humidifier, non-heat producing. Excludes heaters with built-in humidifiers (131, 132).
- 115 Ionizer
- Dehumidifier, portable.
- 117 Evaporative cooler, cooling tower.
- 121 Fireplace, masonry.
- Fireplace, factory-built.
- 123 Fireplace, insert/stove.
- 124 Stove, heating.
- 125 Chimney connector, vent connector.
- 126 Chimney: brick, stone, masonry.
- 127 Chimney: metal. Includes stovepipes and flues.
- 120 Fireplace, chimney, other.
- Furnace, local heating unit, built-in. Includes built-in humidifiers. Excludes process furnaces, kilns (353).
- Furnace, central heating unit. Includes built-in humidifiers. Excludes process furnaces, kilns. (353)
- Boiler (power, process, heating).
- Heater. Includes floor furnaces, wall heaters, and baseboard heaters. Excludes catalytic heaters (142), oil-filled heaters (143), hot water heaters (152).
- 142 Heater, catalytic.
- Heater, oil-filled. Excludes kerosene heaters (141).
- 144 Heat lamp.
- 145 Heat tape.
- Water heater. Includes sink-mounted instant hot water heaters and waterbed heaters.
- 152 Steam line, heat pipe, hot air duct. Includes radiators and hot water baseboard heaters.
- Heating, ventilation, and air conditioning, other.

Electrical Distribution, Lighting, and Power Transfer

- 211 Electrical power (utility) line. Excludes wires from the utility pole to the structure.
- 212 Electrical service supply wires; wires from utility pole to meter box.
- 213 Electric meter, meter box.
- 214 Electrical wiring from meter box to circuit breaker board, fuse box, or panel board.
- 215 Panel board (fuse); switchboard, circuit breaker board with or without ground-fault interrupter.
- 216 Electrical branch circuit. Includes armored (metallic) cable, nonmetallic sheathing, or wire in conduit.
- Outlet, receptacle. Includes wall-type receptacles, electric dryer and stove receptacles.
- 218 Wall-type switch. Includes light switches.

- 219 Ground-fault interrupter (GFI), portable, plug-in.
- 210 Electrical wiring, other.
- 221 Transformer, distribution-type.
- Overcurrent, disconnect equipment. Excludes panel boards.
- 223 Transformer, low-voltage (not more than 50 volts).
- 224 Generator.
- 225 Inverter.
- Uninterrupted power supply (UPS).
- 227 Surge protector.
- 228 Battery charger, rectifier.
- 229 Battery. Includes all battery types.
- Lamp: tabletop, floor, desk. Excludes halogen fixtures (235) and light bulbs (238).
- 232 Lantern, flashlight.
- 233 Incandescent lighting fixture.
- Fluorescent lighting fixture, ballast.
- 235 Halogen lighting fixture or lamp.
- 236 Sodium, mercury vapor lighting fixture or lamp.
- 237 Portable or movable work light, trouble light.
- 238 Light bulb.
- 230 Lamp, lighting, other.
- 241 Night light.
- Decorative lights, line voltage. Includes holiday lighting, Christmas lights.
- 243 Decorative or landscape lighting, low voltage.
- 244 Sign. Includes neon signs.
- 251 Fence, electric.
- 252 Traffic control device.
- Lightning rod, arrester/grounding device.
- Power cord, plug; detachable from appliance.
- Power cord, plug; permanently attached to appliance.
- 263 Extension cord.
- 260 Cord, plug, other.
- 200 Electrical distribution, lighting, and power transfer, other.

Shop Tools and Industrial Equipment

- 311 Power saw.
- 312 Power lathe.
- 313 Power shaper, router, jointer, planer.
- 314 Power cutting tool.
- 315 Power drill, screwdriver.
- 316 Power sander, grinder, buffer, polisher.
- 317 Power hammer, jackhammer.
- 318 Power nail gun, stud driver, stapler.
- 310 Power tools, other.
- 321 Paint dipper.
- 322 Paint flow coating machine.
- 323 Paint mixing machine.
- 324 Paint sprayer.
- 325 Coating machine. Includes asphalt-saturating and rubber-spreading machines.
- 320 Painting tools, other.
- Welding torch. Excludes cutting torches (332).
- Cutting torch. Excludes welding torches (331).
- Burners. Includes Bunsen burners, plumber furnaces, and blowtorches. Excludes weed burners (523).
- 334 Soldering equipment.
- 341 Air compressor.

- 342 Gas compressor.
- 343 Atomizing equipment. Excludes paint spraying equipment (324).
- Pump. Excludes pumps integrated with other types of equipment.
- 345 Wet/Dry vacuum (shop vacuum).
- 346 Hoist, lift, crane.
- Powered jacking equipment. Includes hydraulic rescue tools.
- Drilling machinery or equipment. Includes water or gas drilling equipment.
- 340 Hydraulic equipment, other.
- 351 Heat-treating equipment.
- 352 Incinerator.
- Industrial furnace, oven, kiln. Excludes ovens for cooking (646).
- 354 Tarpot, tar kettle.
- 355 Casting, molding, forging equipment.
- 356 Distilling equipment.
- 357 Digester, reactor.
- Extractor, waste recovery machine. Includes solvent extractors such as used in dry-cleaning operations and garnetting equipment.
- 361 Conveyor. Excludes agricultural conveyors (513).
- Power transfer equipment: ropes, cables, blocks, belts.
- 363 Power takeoff.
- 364 Powered valves.
- 365 Bearing or brake.
- Picking, carding, weaving machine. Includes cotton gins.
- 372 Testing equipment.
- Gas regulator. Includes propane, butane, LP, or natural gas regulators and flexible hose connectors to gas appliances.
- 374 Motor, separate. Includes bench motors. Excludes internal combustion motors (375).
- 375 Internal combustion engine (nonvehicular)
- 376 Printing press.
- 377 Car washing equipment.
- 300 Shop tools and industrial equipment, other.

Commercial and Medical Equipment

- 411 Dental, medical, or other powered bed or chair. Includes powered wheelchairs.
- 412 Dental equipment, other.
- 413 Dialysis equipment.
- 414 Medical imaging equipment. Includes MRI, CAT scan, and ultrasound.
- 415 Medical monitoring equipment.
- 416 Oxygen administration equipment.
- 417 Radiological equipment, x-ray, radiation therapy.
- 418 Sterilizer, medical.
- 419 Therapeutic equipment.
- 410 Medical equipment, other.
- 421 Transmitter.
- 422 Telephone switching gear, including PBX.
- TV monitor array. Includes control panels with multiple TV monitors and security monitoring stations. Excludes single TV monitor configurations (753).
- Studio-type TV camera. Includes professional studio television cameras. Excludes home camcorders and video equipment (756).
- 425 Studio-type sound recording/modulating equipment.
- 426 Radar equipment.
- 431 Amusement ride equipment.
- 432 Ski lift.
- 433 Elevator or lift.

- 434 Escalator.
- 441 Microfilm, microfiche viewing equipment.
- Photo processing equipment. Includes microfilm processing equipment.
- 443 Vending machine.
- 444 Nonvideo arcade game. Includes pinball machines and the like. Excludes electronic video games (755).
- 445 Water fountain, water cooler.
- 446 Telescope. Includes radio telescopes.
- 451 Electron microscope.
- 450 Laboratory equipment, other.
- 400 Commercial and medical equipment, other.

Garden Tools and Agricultural Equipment

- 511 Combine, threshing machine.
- 512 Hay processing equipment.
- 513 Farm elevator or conveyor.
- 514 Silo loader, unloader, screw/sweep auger.
- 515 Feed grinder, mixer, blender.
- 516 Milking machine.
- 517 Pasteurizer. Includes milk pasteurizers.
- 518 Cream separator.
- 521 Sprayer, farm or garden.
- 522 Chain saw.
- 523 Weed burner.
- 524 Lawn mower.
- 525 Lawn, landscape trimmer, edger.
- 531 Lawn vacuum.
- 532 Leaf blower.
- 533 Mulcher, grinder, chipper. Includes leaf mulchers.
- 534 Snow blower, thrower.
- 535 Log splitter.
- 536 Post hole auger.
- 537 Post driver, pile driver.
- 538 Tiller, cultivator.
- 500 Garden tools and agricultural equipment, other.

Kitchen and Cooking Equipment

- Blender, juicer, food processor, mixer.
- 612 Coffee grinder.
- 621 Can opener.
- 622 Knife.
- 623 Knife sharpener.
- 631 Coffee maker or teapot.
- Food warmer, hot plate.
- 633 Kettle.
- 634 Popcorn popper.
- 635 Pressure cooker or canner.
- 636 Slow cooker.
- 637 Toaster, toaster oven, countertop broiler.
- 638 Waffle iron, griddle.
- Wok, frying pan, skillet.
- Bread-making machine.
- Deep fryer.
- 643 Grill, hibachi, barbecue.

- 644 Microwave oven.
- 645 Oven, rotisserie.
- Range with or without an oven or cooking surface. Includes counter-mounted stoves.
- 647 Steam table, warming drawer/table.
- 651 Dishwasher.
- Freezer when separate from refrigerator.
- 653 Garbage disposer.
- 654 Grease hood/duct exhaust fan.
- 655 Ice maker (separate from refrigerator).
- 656 Refrigerator, refrigerator/freezer.
- 600 Kitchen and cooking equipment, other.

Electronic and Other Electrical Equipment

- 711 Computer. Includes devices such as hard drives and modems installed inside the computer casing. Excludes external storage devices (712).
- 712 Computer storage device, external. Includes CD-ROM devices, tape drives, and disk drives. Excludes such devices when they are installed within a computer (711).
- 713 Computer modem, external. Includes digital, ISDN modems, cable modems, and modem racks. Excludes modems installed within a computer (711).
- 714 Computer monitor. Includes LCD or flat-screen monitors.
- 715 Computer printer. Includes multifunctional devices such as copier, fax, and scanner.
- 716 Computer projection device, LCD panel, projector.
- 710 Computer device, other.
- 721 Adding machine, calculator.
- 722 Telephone or answering machine.
- 723 Cash register.
- 724 Copier. Includes large standalone copiers. Excludes small copiers and multifunctional devices (715).
- 725 Fax machine.
- 726 Paper shredder.
- 727 Postage, shipping meter equipment.
- 728 Typewriter.
- 720 Office equipment, other.
- 731 Guitar.
- 732 Piano, organ. Includes player pianos. Excludes synthesizers and musical keyboards (733).
- 733 Musical synthesizer or keyboard. Excludes pianos, organs (732).
- 730 Musical instrument, other.
- 741 CD player (audio). Excludes computer CD, DVD players (712).
- 742 Laser disk player. Includes DVD players and recorders.
- 743 Radio. Excludes two-way radios (744).
- 744 Radio, two-way.
- 745 Record player, phonograph, turntable.
- 747 Speakers, audio; separate components.
- 748 Stereo equipment. Includes receivers, amplifiers, equalizers. Excludes speakers (747).
- 749 Tape recorder or player.
- 740 Sound recording or receiving equipment, other.
- 751 Cable converter box.
- 752 Projector: film, slide, overhead.
- 753 Television.
- 754 VCR or VCR–TV combination.
- 755 Video game, electronic.
- 756 Camcorder, video camera.
- 757 Photographic camera and equipment. Includes digital cameras.
- 750 Video equipment, other.
- 700 Electronic equipment, other.

Personal and Household Equipment

- 811 Clothes dryer.
- 812 Trash compactor.
- Washer/Dryer combination (within one frame).
- Washing machine, clothes.
- 821 Hot tub, whirlpool, spa.
- 822 Swimming pool equipment.
- 830 Floor care equipment, other.
- 831 Broom, electric.
- 832 Carpet cleaning equipment. Includes rug shampooers.
- 833 Floor buffer, waxer, cleaner.
- 834 Vacuum cleaner.
- 841 Comb, hair brush.
- 842 Curling iron.
- 843 Electrolysis equipment.
- 844 Hair curler warmer.
- 845 Hair dryer.
- 846 Makeup mirror, lighted.
- 847 Razor, shaver (electric).
- 848 Suntan equipment, sunlamp.
- 849 Toothbrush (electric).
- Portable appliance designed to produce heat, other.
- 851 Baby bottle warmer.
- 852 Blanket, electric.
- 853 Heating pad.
- 854 Clothes steamer.
- 855 Clothes iron.
- Automatic door opener. Excludes garage door openers (863).
- 862 Burglar alarm.
- 63 Garage door opener.
- 864 Gas detector.
- 865 Intercom.
- Smoke or heat detector, fire alarm. Includes control equipment.
- Thermostat.
- 871 Ashtray.
- 872 Charcoal lighter, utility lighter.
- 873 Cigarette lighter, pipe lighter.
- 874 Fire-extinguishing equipment. Includes electronic controls.
- 875 Insect trap. Includes bug zappers.
- 876 Timer.
- Model vehicles. Includes model airplanes, boats, rockets, and powered vehicles used for hobby and recreational purposes.
- 882 Toy, powered.
- 883 Woodburning kit.
- 891 Clock.
- 892 Gun.
- 893 Jewelry-cleaning machine.
- 894 Scissors.
- 895 Sewing machine.
- 896 Shoe polisher.
- 897 Sterilizer, non-medical.
- Personal and household equipment, other.

Other Equipment Involved in Ignition

000 Equipment involved in ignition, other.

NNN None.

UUU Undetermined.

SECTION H

■ Weather Information

Descriptive information regarding weather conditions that existed at the time and location of the fire origin helps identify conditions that may have contributed to the fire cause or spread.

NFDRS Weather Station ID

Definition

Space is provided to record the six-character identification number for the National Fire Danger Rating System (NFDRS) Weather Station that monitors weather conditions at the location of fire origin.

Purpose

Researchers can obtain specific weather data for the time and location of the fire origin. Specific weather data permits analysis of those conditions that may have contributed to the fire cause or spread.

Entry

Enter the six-digit NFDRS Weather Station ID number. See the completed example at the end of Section H.

■ If the descriptive weather information is not provided, it will be necessary for the local fire department to access the NFDRS database to perform later analysis of wildland fires using weather data. Because this may not always be feasible, fire departments should always complete this section themselves whenever possible.

Weather Type

Definition

The general description of weather conditions at the time and location of fire origin.

Purpose

A description of weather conditions at the time and location of fire origin helps to understand the conditions that may have contributed to the fire cause or spread.

Entry

Enter the two-digit code and description for the weather conditions at the time and location of fire origin. See the completed example at the end of Section H.

WEATHER TYPE CODES

- 10 Clear (less than 1/10 cloud cover).
- 11 Scattered clouds (1/10 to 5/10 cloud cover).
- Broken clouds (6/10 to 9/10 cloud cover).
- Overcast (more than 9/10 cloud cover).
- 14 Foggy.
- 15 Drizzle or mist.
- 16 Rain.
- 17 Snow or sleet.
- 18 Shower.
- 19 Thunderstorm in progress.
- 00 Weather type, other.

Wind Direction

Definition

The direction that the wind was blowing from at ground level. For instance, a north wind blows out of the north and would push a fire to the south.

Purpose

This information helps determine fire causes, rate of spread, and direction of a fire.

Entry

Enter the code and description for the direction that the ground-level wind is coming from. If Wind Speed (next) is zero, enter "N" for Wind Direction. See the completed example at the end of Section H.

WIND DIRECTION CODES

- 1 North.
- Northeast.
- 3 East.
- 4 Southeast.
- 5 South.
- 6 Southwest.7 West.
- 8 Northwest.
- 9 Shifting winds.
- N None/Calm.
- U Undetermined.

Wind Speed

Definition

The speed of the wind at the fire origin upon arrival of the fire suppression forces.

Purpose

Wind speed is possibly the most important factor affecting the rate of fire spread at an incident. This information is used to understand and predict fire behavior as well as to evaluate fire protection strategies.

Entry

Enter the average wind speed, to the nearest mile per hour, at the origin of the fire. Wind speed may be measured using an anemometer. Calm conditions are recorded as "0." See the completed example at the end of Section H.

Temperature and Relative Humidity

Definitions

Air temperature is measured in degrees Fahrenheit at the location of the fire origin when the fire started. Relative humidity is the ratio expressed as a percent of the amount of water vapor to the greatest amount possible at the same temperature.

Purpose

Temperature and humidity information is used to access the potential for ignition in various weather conditions and to understand problems associated with suppressing fires in different ambient temperatures and humidity levels.

Entries

Enter the actual or estimated air temperature in degrees Fahrenheit at the time the incident started. If the temperature is below zero, check or mark the box that indicates a negative temperature.

Enter the percent humidity at the time the incident started. See the completed example at the end of Section H.

Fuel Moisture

Definition

The 10-hour reading of the moisture content of a fuel stick taken in the general area of fire origin. Fuel moisture is expressed as a percentage of the weight (generally ranging from 0 to 25 percent).

Purpose

Information about fuel moisture is used in fire modeling to assess the potential for ignition and rate of spread for different fuels under various weather conditions.

Entry

Enter the fuel moisture percentage level. See the completed example at the end of Section H.

Fire Danger Rating

Definition

Fire danger rating refers to one method of describing the wildfire threat in a particular area, based on the NFDRS. It is derived from both constant and variable fire danger factors that affect the ignition, spread, and difficulty of control of fires and the damage they cause. Factors considered when estimating the fire danger are temperature, relative humidity, wind speed, fuel type, and fuel moisture.

Purpose

This information is used in fire prevention activities to determine when fires are most likely to occur and their severity. Burning bans and park or forest closures or restrictions may be invoked based on the fire danger rating. It is also useful in pre-suppression planning to determine staffing levels and critical initial attack times.

Entry

Enter the code and description that best describes the fire danger.

FIRE DANGER RATING CODES

- 1 Low fire danger.
- 2 Moderate fire danger.
- 3 High fire danger.
- 4 Very high fire danger.
- 5 Extreme fire danger.
- U Undetermined.

Example

NFDRS number: BLM's Storm King Station, ID number 199065.

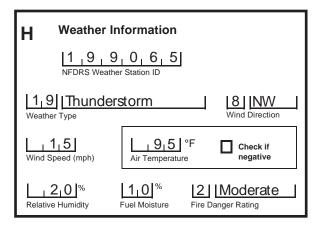
The fire started during a thunderstorm (19).

The winds came from the northwest (8).

The Weather Service reported that the local weather station registered winds of 15–20 miles per hour with occasional gusts up to 25 miles per hour.

95°F, humidity at 20 percent, fuel moisture level at 10 percent.

The danger rating in the fire area was moderate (2).



SECTION I

This section collects information on the types of properties threatened or destroyed in a wildland fire and the magnitude of the loss.

Number of Buildings Ignited

Definition

The number of buildings, if any, that were ignited by the wildland fire.

1



Purpose

This information provides important information to resource planners and policymakers developing zoning ordinances and regulations regarding wildland and rural areas. This information may also help direct future training and incident management efforts.

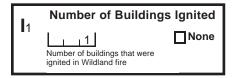
Entry

Enter the number of buildings ignited by the wildland fire. If no buildings were ignited, check or mark the None box.

• A separate exposure report should be filled out for each building ignited.

Example

One building was ignited in a wildland fire:



Number of Buildings Threatened

Definition

The number of buildings, if any, that were threatened, but not ignited by the wildland fire. This field implies that these buildings were "saved" by the efforts of fire suppression resources.

This field is completed only when the fire management tactics employed were for the specific purpose of protecting threatened structures.

Purpose

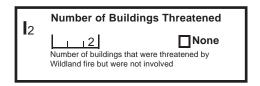
The number of buildings threatened provides important information to resource planners and policymakers developing zoning ordinances and regulations regarding wildland and rural areas. This information may also help direct future training and incident management efforts.

Entry

Enter the number of buildings threatened but not ignited by the wildland fire. Check or mark the None box if no buildings were threatened.

Example

Two farm buildings were threatened in the wildland fire:



■ Total Acres Burned ☆

Definition

This data element captures the total acres burned by a wildland fire.

Purpose

Recording the estimated number of acres burned indicates the magnitude of each fire and of the wildland fire problem overall. This can be used to evaluate progress in wildland fire prevention. This information can also help determine the magnitude of resources that should be devoted to fire protection and the cost effectiveness of various programs. An estimate of the number of acres burned represents a vital component of the overall fire loss picture.

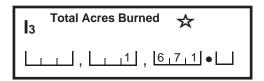
Entry

Enter the total number of acres burned. If less than one acre was burned, the decimal point field should be used to denote tenths of an acre.

This entry should be the most accurate estimate of acres burned that is practical to obtain (one acre equals 43,560 square feet). Estimates based on the use of accurately scaled maps, dot grids, planimeters, or other accurate measuring methods are preferred.

Example

A fire destroys 1,671 acres:



Primary Crops Burned

Definition

This data element identifies up to three types of crops that burned.

Purpose

Information about what type of crops burned is useful as a measure of loss and in tracking trends and patterns in wildland fires as well as planning prevention strategies.

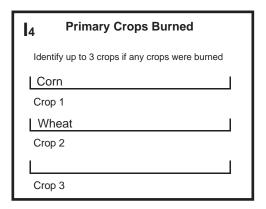
Entry

Enter up to three primary crops that burned in the fire. Enter the crop with the most burned acres first. If no crops were burned, leave this block blank.

1

Example

The fire burned 100 acres of wheat and 150 acres of corn:



SECTION J

Property Management

Definition

The name of the principle entity having responsibility for the maintenance or control of the property where the fire originated. It also allows for the reporting of the percent of the total acres burned for each type of ownership involved.

Purpose

The number of acres burned by property ownership is of significant value to local fire departments as well as to State and Federal wildland agencies. It provides a means to determine the frequency and impact of fire on property managers, especially major holders of land, such as ranchers, lumber and paper companies, agricultural producers, and Federal and State governments. This information also can help target fire protection programs at entities having the greatest risk or loss potential.

Entry

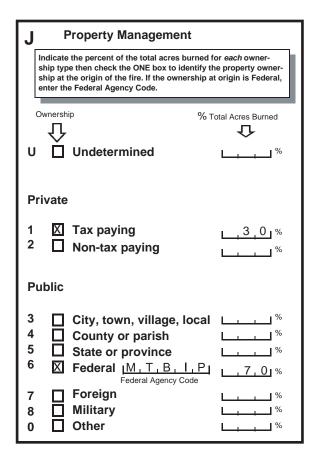
Indicate the percent of the total acres burned for each type of ownership involved, then check or mark the box that best describes the principle entity responsible for the property where the fire originated. If responsibility cannot be determined or is unknown, check or mark the Undetermined box.

- Check or mark only one owner/management entity.
- If the Federal (6) box was checked or marked, enter the Federal Agency Code.

J

Example

The fire started on a privately owned and operated farm (private tax paying) (1) and spread to Montana's Big Horn Canyon (Federal Agency Code MTBIP). Thirty percent of the total acres burned was on the farm and 70 percent was owned by the Federal government:



PROPERTY MANAGEMENT CODES

Private

- 1 Tax paying.
- 2 Non-tax paying.

Public

- 3 City, town, village, or other locality.
- 4 County or parish.
- 5 State or province.
- 6 Federal.
- 7 Foreign.
- 8 Military.
- 0 Other.
- U Undetermined.

	WILDLAND FEDERAL AGENCY CODES -	(WILDLAN	D NIFC STANDARD CODESET)	
	DEPARTMENT OF AGRICULTURE, FOREST SERVICE			
PAALF	Allegheny National Forest	UTFIF	Fishlake National Forest	
CAANF	Angeles National Forest	MTFNF	Flathead National Forest	
AZASF	Apache-Sitgreaves National Forest	SCFMF	Francis Marion & Sumter National Forests	
COARF	Arapaho & Roosevelt National Forests/ Pawnee National Grassland	ORFRF	Fremont National Forest	
UTASF	Ashley National Forest	MTGNF	Gallatin National Forest	
MTBDF	Beaverhead/Deerlodge National Forest	VAVAF	George Washington & Jefferson National Forests	
WYBHF	Bighorn National Forest	WAGPF	Gifford Pinchot National Forest	
MTBRF	Bitterroot National Forest	NMGNF	Gila National Forest	
SDBKF	Black Hills National Forest	COGMF	Grand Mesa/Uncompahgre/Gunnison National Forest	
IDBOF	Boise National Forest	VTGMF	Green Mountain National Forest	
WYBTF	Bridger-Teton National Forest	MTHNF	Helena National Forest	
PRCAF	Caribbean National Forest	MIHIF	Hiawatha National Forest	
IDCTF	Caribou-Targhee National Forest	INHOF	Hoosier National Forest	
NMCAF	Carson National Forest	NVHTF	Humboldt-Toiyabe National Forest	
NMCHP	Chaco Culture National Monument	MIHMF	Huron-Manistee National Forest	
GACHF	Chattahoochee-Oconee National Forest	IDIPF	Idaho Panhandle National Forest	
WICNF	Chequamegon-Nicolet National Forest	CAINF	Inyo National Forest	
TNCNF	Cherokee National Forest	AZKNF	Kaibab National Forest	
MNCPF	Chippewa National Forest	LAKIF	Kisatchie National Forest	
AKCGF	Chugach National Forest	CAKNF	Klamath National Forest	
NMCIF	Cibola National Forest	MTKNF	Kootenai National Forest	
IDCWF	Clearwater National Forest	KYLBF	Land Between the Lakes National Recreation Area	
CACNF	Cleveland National Forest	CALNF	Lassen National Forest	
AZCOF	Coconino National Forest	MTLCF	Lewis & Clark National Forest	
ORCGF	Columbia River Gorge National Scenic Area	NMLNF	Lincoln National Forest	
WACOF	Colville National Forest	MTLNF	Lolo National Forest	
AZCNF	Coronado National Forest	CALPF	Los Padres National Forest	
MTCNF	Custer National Forest	ORMAF	Malheur National Forest	
NDDPF	Dakota Prairie National Grasslands	UTMLF	Manti-Lasal National Forest	
KYDBF	Daniel Boone National Forest	MOMTF	Mark Twain National Forest	
ORDEF	Deschutes National Forest	WYMBF	Medicine Bow National Forest	
UTDIF	Dixie National Forest	CAMNF	Mendocino National Forest	
CAENF	Eldorado National Forest	ILMPF	Midewin National Tall Grass Prairie	

	DEPARTMENT OF AGRICULTU	RE, FORES	ST SERVICE (CONT'D)
CAMDF	Modoc National Forest	COSJF	San Juan National Forest
WVMOF	Monongahela National Forest	NMSNF	Santa Fe National Forest
WAMSF	Mt. Baker-Snoqualmie National Forest	SCSRF	Savannah River Forest
ORMHF	Mt. Hood National Forest	IDSTF	Sawtooth National Forest
TXTXF	National Forests and Grasslands In Texas	CASQF	Sequoia National Forest
ALALF	National Forests in Alabama	CASHF	Shasta-Trinity National Forest
FLFNF	National Forests in Florida	ILSHF	Shawnee National Forest
MSMNF	National Forests in Mississippi	WYSHF	Shoshone National Forest
NCNCF	National Forests in North Carolina	CASNF	Sierra National Forest
NENBF	Nebraska National Forest	ORSIF	Siskiyou National Forest
IDNPF	Nez Perce National Forest	ORSUF	Siuslaw National Forest
OROCF	Ochoco National Forest	CASRF	Six Rivers National Forest
WAOWF	Okanogan/Wenatchee National Forest	CASTF	Stanislaus National Forest
WAOLF	Olympic National Forest	MNSUF	Superior National Forest
MIOTF	Ottawa National Forest	CATNF	Tahoe National Forest
AROUF	Ouachita National Forest	AKTNF	Tongass National Forest
AROZF	Ozark & St. Francis National Forests	AZTNF	Tonto National Forest
IDPAF	Payette National Forest	UTUIF	Uinta National Forest
COPSF	Pike & San Isabel National Forest	ORUMF	Umatilla National Forest
CAPNF	Plumas National Forest	ORUPF	Umpqua National Forest
AZPNF	Prescott National Forest	ORWWF	Wallowa-Whitman National Forest
CORGF	Rio Grande National Forest	UTWCF	Wasatch-Cache National Forest
ORRRF	Rogue River National Forest	OHWAF	Wayne National Forest
CORTF	Routt National Forest	NHWMF	White Mountain National Forest
IDSCF	Salmon-Challis National Forest	COWRF	White River National Forest
CABDF	San Bernardino National Forest	ORWIF	Willamette National Forest
		ORWNF	Winema National Forest

DEPARTMENT OF COMMERCE, NATIONAL WEATHER SERVICE			
MTBLW	Billings Weather Service	MTGFW	Great Falls Weather Service
NDBMW	Bismark Weather Service	MTMSW	Missoula Weather Service
MTGGW	Glasgow Weather Service	CANWS	National Weather Service
NDGFW	Grand Forks Weather Service		

DEPARTMENT OF DEFENSE			
MDABQ	Aberdeen Proving Grounds	NCCLQ	Camp LeJeune
KYBGQ	Blue Grass Army Depot	CAMCP	Camp Pendleton Marine Corps Base

DEPARTMENT OF DEFENSE (CONT'D)			
NCCPQ	Cherry Point	CAFHL	Hunter Liggett Military Reservation
FLEAQ	Eglin Air Force Base	NVNAF	Nellis Air Force Base
NVFNA	Fallon Naval Air Station	NVNTE	Nevada Test Site
NCFBQ	Fort Bragg	NHNBQ	New Boston Air Force Station
KYFCQ	Fort Campbell	SCSHQ	Shaw Air Force Base
NYFDQ	Fort Drum Military Reservation	CASAD	Sierra Army Depot
SCFJQ	Fort Jackson Army Training Center	CAAFV	Vandenburg Air Force Base
KYFKQ	Fort Knox	NYWPQ	West Point Military Reservation
GAFSQ	Fort Stewart	CTWEQ	Westover Air Force Base

DEPARTMENT OF ENERGY

WAHNE Hanford Site

	DEPARTMEN	T OF INTER	IOR
OKACA	Alabama-Coushatta Agency	NDFTA	Fort Totten Agency
AKANA	Anchorage Agency	AZFYA	Fort Yuma Agency
AKBEA	Bethel Agency	WIGLA	Great Lakes Agency
MTBFA	Blackfeet Agency	CAHIA	Hoopa Agency
CACCA	Central Calif Agency	AZHOA	Hopi Agency
SDCRA	Cheyenne River Reservation	KSHTA	Horton Reservation
OKCHA	Chickasaw Agency	NMJIA	Jicarilla Agency
MSCHA	Choctaw Agency	NMLAA	Laguna Agency
AKCIA	Chugachmiut Agency	SDLBA	Lower Brule Reservation
AZCRA	Colorado River Agency	WIMEA	Menominee Agency
WACOA	Colville Agency	NMMEA	Mescalero Agency
MTCRA	Crow Agency	AKMEA	Metlakatla Agency
SDCCA	Crow Creek Reservation	OKMIA	Miami Agency
NCECA	Eastern Cherokee Agency	MIMIA	Michigan Agency
NVENA	Eastern Nevada Agency	MNMNA	Minnesota Agency
AKFAA	Fairbanks Agency	AKNOA	Nome Agency
MTFHA	Flathead Agency	IDNIA	North Idaho Agency
AZFTA	Fort Apache Agency	CANCA	Northern California Agency
MTFBA	Fort Belknap Agency	MTNCA	Northern Cheyenne Agency
NDFBA	Fort Berthold Agency	NMNPA	Northern Pueblos Agency
CAFBA	Fort Bidwell Agency	WAOPA	Olympic Peninsula Agency
IDFHA	Fort Hall Agency	OKOSA	Osage Agency
MTFPA	Fort Peck Agency	AZPPA	Papago Agency

	DEPARTMENT OF	INTERIOR (CONT'D)
MEPAA	Passamaquoddy Agency	COSUA	Southern Ute Reservation
OKPAA	Pawnee Agency	WASPA	Spokane Agency
MEPEA	Penobscot Agency	NDSRA	Standing Rock Reservation
AZPMA	Pima Agency	CASYC	Sycuan Agency
SDPRA	Pine Ridge Reservation	NMTAA	Taos NPA Agency
WAPSA	Puget Sound Agency	AZTCA	Truxton Canon Agency
NMRNA	Ramah Navajo Agency	CATIA	Tule River Agency
MNRLA	Red Lake Agency	NDTMA	Turtle Mountain Agency
MTRBA	Rocky Boys Agency	UTUOA	Uintah and Ouray Agency
MTRNA	Ronan Agency	ORUMA	Umatilla Agency
SDRBA	Rosebud Reservation	COUMA	Ute Mountain Reservation
IASFA	Sac & Fox Agency	ORWSA	Warm Springs Agency
AZSCA	San Carlos Agency	NVWNA	Western Nevada Agency
FLSEA	Seminole Agency	OKWEA	Wewoka Agency
ORSIA	Siletz Agency	UTUMA	White Mesa/Ute Mountain Agency
SDSWA	Sisseton-Wahpeton Reservation	WYWRA	Wind River Reservation
CASCA	Southern California Agency	NEWBA	Winnebago Reservation
UTPIA	Southern Piute Agency	WAYAA	Yakima Agency
SCAAA	Southern Plains Agency	SDYAA	Yankton Reservation
OKAAA	Southern Plains Agency	NMZUA	Zuni Agency
NMSPA	Southern Pueblos Agency		

DEPARTMENT OF INTERIOR, BUREAU OF LAND MANAGEMENT			
CABBD	Bakersfield District	CACDD	California Desert District
NVBAC	Battle Mountain Airtanker Base	CANOD	Northern California District

	DEPARTMENT OF INTERIOR	, BUREAU	OF RECLAMATION
NDAWR	Arrowwood National Wildlife Refuge	MTLMR	Lee Metcalf National Wildlife Refuge
NDADR	Audubon National Wildlife Refuge	NDLLR	Long Lake National Wildlife Refuge
MTBLR	Benton Lake National Wildlife Refuge	NDLWR	Lostwood Lake National Wildlife Refuge
MTBWR	Bowdoin National Wildlife Refuge	MTMLR	Medicine Lake National Wildlife Refuge
MTCMR	Charles M. Russell National Wildlife Refuge	CABRL	Mid-Pacific Region
NDCLR	Chase Lake National Wildlife Refuge	MTNBR	National Bison Range
NDCRR	Crosby Wetland Management District	MTRLR	Red Rock Lakes National Wildlife Refuge
NDDLR	Des Lacs National Wildlife Refuge	NDSLR	Spirit Lake Wetland Management District
NDJCR	J. Clark Salyer National Wildlife Refuge	NDSHR	Sullys Hill National Game Preserve
IDKOR	Kootenai National Wildlife Refuge	NDTWR	Tewaukon National Wildlife Refuge
NDKMR	Kulm Wetland Management District	NDUSR	Upper Souris National Wildlife Refuge
NDLIR	Lake Ilo National Wildlife Refuge	NDVCR	Valley City Wetland Management District

	DEPARTMENT OF INTERIOR	, FISH AND W	/ILDLIFE SERVICE
SCACR	Ace Basin National Wildlife Refuge	MNBGR	Big Stone National Wildlife Refuge
MNAGR	Agassiz National Wildlife Refuge	AZBWR	Bill Williams National Wildlife Refuge
COALR	Alamosa National Wildlife Refuge	NMBTR	Bitter Lake National Wildlife Refuge
AKAMR	Alaska Maritime National Wildlife Refuge	GABLR	Blackbeard Island National Wildlife Refuge
AKAPR	Alaska Peninsula National Wildlife Refuge	ALBWR	Blowing Wind Cave National Wildlife Refuge
NCALR	Alligator River National Wildlife Refuge	DEBHR	Bombay Hook National Wildlife Refuge
NVAIR	Anaho Island National Wildlife Refuge	ALBOR	Bon Secour National Wildlife Refuge
TXAHR	Anahuac National Wildlife Refuge	GABSR	Bond Swamp National Wildlife Refuge
ORAKR	Ankeny National Wildlife Refuge	NMBDR	Bosque del Apache National Wildlife Refuge
CAADR	Antioch Dunes National Wildlife Refuge	LABCR	Bouge Chitto National Wildlife Refuge
TXARR	Aransas National Wildlife Refuge	TXBRR	Brazoria National Wildlife Refuge
COARR	Arapaho National Wildlife Refuge	LABTR	Breton National Wildlife Refuge
FLACR	Archie Carr National Wildlife Refuge	COBPR	Brown's Park National Wildlife Refuge
AKARR	Arctic National Wildlife Refuge	VIBIR	Buck Island National Wildlife Refuge
MEARR	Arrostook National Wildlife Refuge	AZBAR	Buenos Aires National Wildlife Refuge
FLLXR	Arthur R. Marshall/Loxahatchee National Wildlife Refuge	TXBFR	Buffalo Lake National Wildlife Refuge
NVAMR	Ash Meadows National Wildlife Refuge	AZCPR	Cabeza National Wildlife Refuge
LAATR	Atchafalaya National Wildlife Refuge	PRCBR	Cabo Rojo National Wildlife Refuge
TXATR	Attwater Prairie Chicken National Wildlife Refuge	ARCRR	Cache River National Wildlife Refuge
COBAR	Baca National Wildlife Refuge	TXCLR	Caddo Lake National Wildlife Refuge
VABBR	Back Bay National Wildlife Refuge	FLCAR	Caloosahatchee National Wildlife Refuge
TXBAR	Balcones Canyon National Wildlife Refuge	IDCSR	Camas National Wildlife Refuge
ORBMR	Bandon Marsh National Wildlife Refuge	LACPR	Cameron Prairie National Wildlife Refuge
GABNR	Banks Lake National Wildlife Refuge	WVCVR	Canaan Valley National Wildlife Refuge
ORBKR	Baskett Slough National Wildlife Refuge	NJCMR	Cape May National Wildlife Refuge
LABAR	Bayou Cocodrie National Wildlife Refuge	ORCPR	Cape Meares National Wildlife Refuge
LABSR	Bayou Sauvage National Wildlife Refuge	SCCMR	Cape Romain National Wildlife Refuge
IDBLR	Bear Lake National Wildlife Refuge	SCCRR	Carolina Sandhills National Wildlife Refuge
UTBBR	Bear River Migratory Bird Refuge	CACAR	Castle Rock National Wildlife Refuge
ORBVR	Bear Valley National Wildlife Refuge	LACTR	Catahoula National Wildlife Refuge
AKBCR	Becharof National Wildlife Refuge	NCCDR	Cedar Island National Wildlife Refuge
XBBR	Big Boggy National Wildlife Refuge	FLCKR	Cedar Keys National Wildlife Refuge
LABBR	Big Branch Marsh National Wildlife Refuge	FLCHR	Chassahowitzka National Wildlife Refuge
ARBGR	Big Lake National Wildlife Refuge	ILCTR	Chautauqua National Wildlife Refuge
MOBMR	Big Muddy National Wildlife Refuge	MDBWR	Chesapeake Marshlands National Wildlife Refuge Complex
INBOR	Big Oaks National Wildlife Refuge	TNCHR	Chicksaw National Wildlife Refuge

	DEPARTMENT OF INTERIOR, FISH	AND WILD	DLIFE SERVICE (CONT'D)
VACHR	Chincoteague National Wildlife Refuge	MAEMR	Eastern Massachusetts National Wildlife Refuge Complex
ALCHR	Choctaw National Wildlife Refuge	MDENR	Eastern Neck National Wildlife Refuge
CACBR	Cibola National Wildlife Refuge	VAESR	Eastern Shore of Virginia
AZCBR	Cibola National Wildlife Refuge	VAEVR	Eastern Virginia Rivers Refuges
KYCLR	Clark's River National Wildlife Refuge	NJERR	Edwin B. Forsythe National Wildlife Refuge
CACLR	Clear Lake National Wildlife Refuge	FLEGR	Egmont Key National Wildlife Refuge
ORCOR	Cold Springs National Wildlife Refuge	PAERR	Erie National Wildlife Refuge
WACBR	Columbia National Wildlife Refuge	ALEFR	Eufaula National Wildlife Refuge
TXCOR	Columbia Lakes National Wildlife Refuge	NVFLR	Fallon National Wildlife Refuge
CACUR	Colusa National Wildlife Refuge	ARFSR	Felsenthal National Wildlife Refuge
WACNR	Conboy Lake National Wildlife Refuge	MNFFR	Fergus Falls Wetland Management District
WACOR	Copalis National Wildlife Refuge	ALFER	Fern Cave National Wildlife Refuge
ILCOR	Crab Orchard National Wildlife Refuge	UTFSR	Fish Springs National Wildlife Refuge
MNCMR	Crane Meadows National Wildlife Refuge	WAFLR	Flattery Rocks National Wildlife Refuge
NECLR	Crescent Lake National Wildlife Refuge	KSFLR	Flint Hills National Wildlife Refuge
FLCLR	Crocodile Lake National Wildlife Refuge	FLFPR	Florida Panther National Wildlife Refuge
TNCRR	Cross Creeks National Wildlife Refuge	NEFNR	Fort Niobrara
FLCRR	Crystal River National Wildlife Refuge	WIGNR	Genoa National Fish Hatchery
PRCUR	Culebra National Wildlife Refuge	MSGBR	Grand Bay National Wildlife Refuge
NCCRR	Currituck National Wildlife Refuge	LAGCR	Grand Cote National Wildlife Refuge
ILCYR	Cypress Creek National Wildlife Refuge	WAGHR	Gray's Harbor National Wildlife Refuge
MSDAR	Dahomey National Wildlife Refuge	IDGLR	Grays Lake National Wildlife Refuge
LADRR	D'Arbonne National Wildlife Refuge	NHGBR	Great Bay National Wildlife Refuge
IDDFR	Deer Flat National Wildlife Refuge	VAGDR	Great Dismal Swamp National Wildlife Refuge
CADLR	Delevan National Wildlife Refuge	MOGRR	Great Rivers National Wildlife Refuge
LADLR	Delta National Wildlife Refuge	NJGSR	Great Swamp National Wildlife Refuge
PRDER	Desecheo National Wildlife Refuge	FLGWR	Great White Heron National Wildlife Refuge
NVDSR	Desert National Wildlife Refuge	VIGCR	Green Cay National Wildlife Refuge
IADSR	DeSoto National Wildlife Refuge	NMGRR	Grula National Wildlife Refuge
MNDLR	Detroit Lakes Wetland Management District	TXHGR	Hagerman National Wildlife Refuge
MIDRR	Detroit River International Wildlife Refuge	IDHFR	Hagerman National Fish Hatchery
NDDVR	Devil's Lake Wetland Management District	HIHAR	Hakalau Forest National Wildlife Refuge
OKDXR	Dexter National Fish Hatchery	MNHSR	Hamden Slough National Wildlife Refuge
NMDXR	Dexter National Fish Hatchery & Technology Center	HIHNR	Hanalei National Wildlife Refuge
IADAR	Driftless National Wildlife Refuge	LAHAR	Handy Brake National Wildlife Refuge
WADNR	Dungeness National Wildlife Refuge	WAHFR	Hanford Reach National Monument

DEPARTMENT OF INTERIOR, FISH AND WILDLIFE SERVICE				
MIHAR	Harbor Island National Wildlife Refuge	HIKIR	Kilaeu Point National Wildlife Refuge	
GAHSR	Harris Neck National Wildlife Refuge	MIKWR	Kirtlands Warbler National Wildlife Refuge	
ORHMR	Hart Mountain National Antelope Refuge	KSKIR	Kirwin National Wildlife Refuge	
TNHTR	Hatchie National Wildlife Refuge	CAKLR	Klamath Basin National Wildlife Refuge	
AZHVR	Havasu National Wildlife Refuge	ORKLR	Klamath Forest National Wildlife Refuge	
HIPCR	Hawaii Pacific Islands National Wildlife Refuge Complex	AKKDR	Kodiak National Wildlife Refuge	
HIHIR	Hawaiian Islands National Wildlife Refuge	AZKGR	Kofa National Wildlife Refuge	
MIHFR	Hiawatha Forest National Fish Hatchery	AKKUR	Koyukuk National Wildlife Refuge	
MSHLR	Hillside National Wildlife Refuge	LALCR	Lacassine National Wildlife Refuge	
FLHBR	Hobe Sound National Wildlife Refuge	SDLCR	Lacreek National Wildlife Refuge	
ARHLR	Holla Bend National Wildlife Refuge	WILCR	LaCrosse District, Upper Mississippi National Wildlife Refuge	
WIHRR	Horicon National Wildlife Refuge	TXLGR	Laguna Atascosa National Wildlife Refuge	
HIHLR	Huleia National Wildlife Refuge	PRLCR	Laguna Cartagena National Wildlife Refuge	
CAHBR	Humboldt Bay	SDLAR	Lake Andes National Wildlife Refuge	
MIHUR	Huron National Wildlife Refuge	TNLIR	Lake Isom National Wildlife Refuge	
SDHUR	Huron Wetland Management District	LALOR	Lake Ophelia National Wildlife Refuge	
ILILR	Illinois River National Wildlife Refuge	NHUBR	Lake Umbagog National Wildlife Refuge	
WIIRR	Illinois River National Wildlife Refuge	FLLRR	Lake Wales Ridge National Wildlife Refuge	
AZIMR	Imperial National Wildlife Refuge	FLLWR	Lake Woodruff National Wildlife Refuge	
AKINR	Innoko National Wildlife Refuge	NMLVR	Las Vegas National Wildlife Refuge	
NYIRR	Iroquois National Wildlife Refuge	WALWR	Leavenworth National Fish Hatchery	
FLISR	Island Bay National Wildlife Refuge	WILPR	Leopold Wetland Management	
AKIZR	Izembek National Wildlife Refuge	ORLAR	Lewis & Clark National Wildlife Refuge	
FLJNR	J.N. "Ding" Darling National Wildlife Refuge	MNLFR	Litchfield Wetland Management District	
HIJCR	James C. Campbell National Wildlife Refuge	WALPR	Little Pend Oreille National Wildlife Refuge	
VAJRR	James River National Wildlife Refuge	OKLRR	Little River National Wildlife Refuge	
PATNR	John Heinz at Tinicum National Wildlife Refuge	OKLSR	Little Sandy National Wildlife Refuge	
WIJRR	Jordan River National Fish Hatchery	ARLOR	Logan Cave National Wildlife Refuge	
WAJHR	Julia Bulter Hansen National Wildlife Refuge for the Columbia White Tailed Deer	NYLIR	Long Island National Wildlife Refuge Complex	
HIKKR	Kakahaia National Wildlife Refuge	LALWR	Louisiana Wetlands	
AKKAR	Kanuti National Wildlife Refuge	TNLHR	Lower Hatchie National Wildlife Refuge	
AKKNR	Kenai National Wildlife Refuge	CALKR	Lower Klamath National Wildlife Refuge	
CAKRR	Kern National Wildlife Refuge	ORLOR	Lower Klamath National Wildlife Refuge	
FLKER	Key West National Wildlife Refuge	TXRGR	Lower Rio Grande Valley National Wildlife Refuge	

	DEPARTMENT OF INTERIOR, FISH	AND WILD	LIFE SERVICE (CONT'D)
FLLSR	Lower Suwannee National Wildlife Refuge	MEMHR	Moosehorn National Wildlife Refuge
NCMCR	Mackay Island National Wildlife Refuge	NMMRR	Mora National Wildlife Refuge
SDMDR	Madison Wetland Management District	MSMKR	Morgan Brake National Wildlife Refuge
MECMR	Maine Coastal Islands National Wildlife Refuge Complex	MNBNR	Morris National Wildlife Refuge
ORMAR	Malheur National Wildlife Refuge	TXMLR	Mule Shoe National Wildlife Refuge
LAMYR	Mandalay National Wildlife Refuge	INMSR	Muscatatuck National Wildlife Refuge
KSMCR	Maris des Cygnes National Wildlife Refuge	WYNER	National Elk Refuge
ILMTR	Mark Twain National Wildlife Refuge	FLNKR	National Key Deer Refuge
VAMNR	Mason Neck National Wildlife Refuge	IANSR	Neal Smith National Wildlife Refuge
TXMAR	Matagorda National Wildlife Refuge	WINCR	Necedah National Wildlife Refuge
MSMBR	Mathews Brake National Wildlife Refuge	ORNTR	Nestucca Bay National Wildlife Refuge
FLMAR	Matlacha Pass National Wildlife Refuge	WANQR	Nisqually National Wildlife Refuge
NCMTR	Mattamuskeet National Wildlife Refuge	NENPR	North Platte National Wildlife Refuge
NMMXR	Maxwell National Wildlife Refuge	ARNAR	Northeast Arkansas Refuges
TXMCR	McFaddin National Wildlife Refuge	AKNOR	Nowitna National Wildlife Refuge
MNMGR	McGregor District, Upper Mississippi National Wildlife Refuge	MSNXR	Noxubee National Wildlife Refuge
ORMKR	McKay Creek National Wildlife Refuge	VAOQR	Occoquan Bay National Wildlife Refuge
WAMNR	McNary National Wildlife Refuge	WVOHR	Ohio River Islands National Wildlife Refuge
FLMIR	Merritt Island National Wildlife Refuge	GAOKR	Okefenokee National Wildlife Refuge
NMMSR	Mescalero Refuge Hatchery	OKOBR	Oklahoma Bat Caves National Wildlife Refuge
MIMWR	Michigan Wetland Management District	OKOPR	Optima National Wildlife Refuge
MIMIR	Michigan Island National Wildlife Refuge	ORORR	Oregon Islands National Wildlife Refuge
WAMCR	Mid Columbia National Wildlife Refuge Complex	OHOTR	Ottawa National Wildlife Refuge
MOMOR	Mingo National Wildlife Refuge	UTOWR	Ouray National Wildlife Refuge
IDMNR	Minidoka National Wildlife Refuge	AROVR	Overflow National Wildlife Refuge
MNMVR	Minnesota Valley National Wildlife Refuge	NVPRR	Pahranagat National Wildlife Refuge
VTMQR	Missisquoi National Wildlife Refuge	VAPBX	Paint Bank National Fish Hatchery
MSMSR	Mississippi Sandhill Crane National Wildlife Refuge	MSPNR	Panther Swamp National Wildlife Refuge
MSMWR	Mississippi Wetlands Authority	MAPRR	Parker River National Wildlife Refuge
NVMVR	Moapa Valley National Wildlife Refuge	FLPAR	Passage Key National Wildlife Refuge
CAMDR	Modoc National Wildlife Refuge	INPKR	Patoka River National Wildlife Refuge
COMVR	Monte Vista National Wildlife Refuge	MDPWR	Patuxent National Wildlife Refuge
100170	Montezuma National Wildlife Refuge	NCPLR	Pea Island National Wildlife Refuge
NYMZR	Montezuma National Milame Velage	INOI LIX	rea isianu Nationai Wilume Keluge

NCPER Pee Dee National Wildlife Refuge OKSLR Salt Plains National Wildlife Refuge	
FLPLR Pelican Island National Wildlife Refuge CASSR Salton Sea National Wildlife Refuge	
MIPCR Pendills Creek National Fish Hatchery NMSNR San Andreas National Wildlife Refuge	
GAPDR Piedmont National Wildlife Refuge TXSNR San Bernard National Wildlife Refuge	
WAPIR Pierce National Wildlife Refuge AZSBR San Bernardino National Wildlife Refug	е
SCPKR Pinckney Island National Wildlife Refuge CAFW San Francisco Bay National Wildlife Ref	uge
FLPIR Pine Island National Wildlife Refuge WASNR San Juan Islands National Wildlife Refu	ge
FLPNR Pinellas National Wildlife Refuge CALUR San Luis National Wildlife Refuge	
NCPOR Pocosin Lakes National Wildlife Refuge CASPR San Pablo National Wildlife Refuge	
ARPCR Pond Creek National Wildlife Refuge SDSLR Sand Lake National Wildlife Refuge	
IAPLR Port Louisa National Wildlife Refuge VISPR Sandy Point National Wildlife Refuge	
VAPRR Potomac River Refuges TXSTR Santa Ana National Wildlife Refuge	
VAPQR Presquile National Wildlife Refuge SCSNR Santee National Wildlife Refuge	
DEPHR Prime Hook National Wildlife Refuge ILSVR Savanna District, Upper Mississippi National Wildlife Refuge	
WAPRR Protection Island National Wildlife Refuge GASAR Savannah Coastal Refuges	
NCMUR Pungo National Wildlife Refuge WYSER Seedskadee National Wildlife Refuge	
WAQLR Quillayute Needles National Wildlife Refuge AKSWR Selawik National Wildlife Refuge	
KSQUR Quivira National Wildlife Refuge MISNR Seney National Wildlife Refuge	
MERCR Rachel Carson National Wildlife Refuge OKSQR Sequoyah National Wildlife Refuge	
NERBR Rainwater Basin Wetland Management NMSER Sevilleta National Wildlife Refuge District	
VARVR Rappahannock River Valley NVSAR Sheldon Antelope National Wildlife Refe	ıge
LARRR Red River National Wildlife Refuge ORSHR Sheldon-Hart Mountain National Wildli Refuge Complex	fe
TNRLR Reelfoot National Wildlife Refuge LASHR Shell Keys National Wildlife Refuge	
RIRIR Rhode Island National Wildlife Refuge Complex MNSBR Sherburne National Wildlife Refuge	
MNRLR Rice Lake National Wildlife Refuge MISSR Shiawassee National Wildlife Refuge	
WARFR Ridgefield National Wildlife Refuge ORSIR Siletz Bay National Wildlife Refuge	
NCRRR Roanoke River National Wildlife Refuge TXSRR South Texas Refuge Complex	
CORMR Rocky Mountain Arsenal National Wildlife Refuge	
NVRLR Ruby Lake National Wildlife Refuge MOSQR Squaw Creek National Wildlife Refuge	
MNRYR Rydell National Wildlife Refuge MSSCR St. Catherine Creek National Wildlife Re	fuge
LASBR Sabine National Wildlife Refuge WISCR St. Croix Wetland Management District	
CASWR Sacramento National Wildlife Refuge FLSJR St. Johns National Wildlife Refuge	
CASAR Sacramento River National Wildlife Refuge FLSMR St. Marks National Wildlife Refuge	
WASAR Saddle Mountain National Wildlife Refuge FLSVR St. Vincent National Wildlife Refuge	



	DEPARTMENT OF INTERIOR, FISH	AND WILD	LIFE SERVICE (CONT'D)
WASGR	Steigerwald Lake National Wildlife Refuge	GATYR	Tybee National Wildlife Refuge
CTSMR	Stewart B. McKinney National Wildlife Refuge	ORUMR	Umatilla National Wildlife Refuge
NVSWR	Stillwater National Wildlife Refuge	IAUSR	Union Slough National Wildlife Refuge
MESHR	Sunkhaze Meadows National Wildlife Refuge	ORUKR	Upper Klamath National Wildlife Refuge
NJSPR	Supawna Meadows National Wildlife Refuge	LAUOR	Upper Ouachita National Wildlife Refuge
CASTR	Sutter National Wildlife Refuge	NEVAR	Valentine National Wildlife Refuge
MOSWR	Swan Lake National Wildlife Refuge	SCWAR	Waccamaw National Wildlife Refuge
NCSWR	Swanquarter National Wildlife Refuge	NJWKR	Walkill River National Wildlife Refuge
MASCR	Sylvio O. Conte National Wildlife Refuge	ARWPR	Wapanocca National Wildlife Refuge
MSTAR	Tallehatchie National Wildlife Refuge	ORWTR	Wapato National Wildlife Refuge
MNTMR	Tamarac National Wildlife Refuge	ORWSR	Warm Springs National Fish Hatchery
FLTBR	Tampa Bay Refuges	WAWIR	Washington Islands National Wildlife Refuge
FLTTR	Ten Thousand Islands National Wildlife Refuge	OKWSR	Washita National Wildlife Refuge
TNTNR	Tennessee National Wildlife Refuge	GAWSR	Wassaw National Wildlife Refuge
LATNR	Tensas River National Wildlife Refuge	ALWAR	Watercress Darter National Wildlife Refuge
AKTER	Tetlin National Wildlife Refuge	SDWAR	Waubay National Wildlife Refuge
TXTCR	Texas Chenier Plain Complex	ALWLR	Wheeler National Wildlife Refuge
TXTMR	Texas Mid Coast Refuge Complex	ARWHR	White River National Wildlife Refuge
TXTPR	Texas Point National Wildlife Refuge	WIWCR	Whittlesey Creek National Wildlife Refuge
ORTAR	Three Arch Rocks National Wildlife Refuge	OKWMR	Wichita Mountains National Wildlife Refuge
CATNR	Tijuana Slough National Wildlife Refuge	WAWLR	Willapa National Wildlife Refuge
OKTSR	Tishomingo National Wildlife Refuge	ORWMR	William L. Finley National Wildlife Refuge
AKTGR	Togiak National Wildlife Refuge	AZWCR	William's Creek National Wildlife Refuge
WATPR	Toppenish National Wildlife Refuge	MNWWR	Windom Wetland Management District
WITPR	Trempeleau National Wildlife Refuge	WIWNR	Winona District, Upper Mississippi National Wildlife Refuge
TXTRR	Trinity River National Wildlife Refuge	GAWLR	Wolf Island National Wildlife Refuge
ORTUR	Tualatin River National Wildlife Refuge	MSYZR	Yazoo National Wildlife Refuge
CATLR	Tule Lake National Wildlife Refuge	AKYDR	Yukon Delta National Wildlife Refuge
WATBR	Turnbull National Wildlife Refuge	AKYFR	Yukon Flats National Wildlife Refuge
ILTWR	Two Rivers National Wildlife Refuge		

	DEPARTMENT OF INTERIO	R, NATIONA	L PARK SERVICE
KYALP	Abraham Lincoln Birthplace National Historic Site	СОВСР	Black Canyon of the Gunnison National Preserve
MEACP	Acadia National Park	NCBRP	Blueridge Parkway
MAADP	Adams National Historic Site	VABWP	Booker T. Washington National Monument
NEAFP	Agate Fossil Beds National Monument	MABOP	Boston National Historic Park
AKROP	AKRO Default Park Group	MSBCP	Brices Cross Roads National Battlefield Site
TXAFP	Alibates Flint Quarries National Monument	UTBRP	Bryce Canyon National Park
PAAPP	Allegheny Portage Railroad National Historic Site	VIBIP	Buck Island Reef National Monument
GUAMP	American Memorial Park	ARBUP	Buffalo National River
TXAMP	Amistad National Recreation Area	CACAP	Cabrillio National Monument
GAANP	Andersonville National Historic Site	FLCAP	Canaveral National Seashore
TNASP	Andrew Johnson National Historic Site	LACAP	Cane River Creole National Historic Park
AKANP	Aniakchak National Park & Preserve	AZCAP	Canyon De Chelly National Monument
DCANP	Antietam National Battlefield	UTCAP	Canyonlands National Park
WIAIP	Apostle Islands National Lakeshore	MACCP	Cape Cod National Seashore
DCAPP	Appalachian National Scenic Trail	NCCHP	Cape Hatteras National Seashore
VAACP	Appomattox Court House National Historic Park	AKKRP	Cape Krusenstern National Monument
UTARP	Arches National Park	NCCLP	Cape Lookout National Seashore
ARARP	Arkansas Post National Monument	UTCRP	Capitol Reef National Park
MDAIP	Assateague Island National Seashore	NMCAP	Capulin Volcano National Monument
MIAUP	Automobile National Heritage Area	NCCSP	Carl Sandburg Home National Historic Site
NMAZP	Aztec Ruins National Monument	NMCCP	Carlsbad Caverns National Park
SDBDP	Badlands National Park	AZCGP	Casa Grande National Monument
NMBAP	Bandelier National Monument	FLCDP	Castillo De San Marcos National Monument
COBFP	Bents Old Fort National Historic Site	DCCAP	Catoctin Mountain Park
AKBLP	Bering Land Bridge National Preserve	UTCBP	Cedar Breaks National Monument
TXBBP	Big Bend National Park	TXCHP	Chamizal National Monument
FLBCP	Big Cypress National Park	CACNP	Channel Islands National Park
MTBHP	Big Hole National Battlefield	SCCPP	Charles Pinckney National Historic Site
MTBIP	Big Horn Canyon National Recreation Area	GACRP	Chattahoochee River National Recreation Area
TNBSP	Big South Fork National Recreation Area	DCCOP	Chesapeake & Ohio Canal National Historic Park
TXBTP	Big Thicket National Preserve	ILCPP	Chicago Portage National Historic Site
WYBHP	Bighorn Canyon National Recreation Area	GACHP	Chickamauga & Chatanooga National Me- morial Park
FLBIP	Biscayne National Preserve	OKCHP	Chickasaw National Recreation Area

DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE (CONT'D)							
AZCHP	Chiricahua National Monument	NYFIP	Fire Island National Seashore				
VICHP	Christiansted National Historic Site	OHFLP	First Ladies National Historic Site				
IDCRP	City of Rocks National Reserve	COFFP	Florissant Fossil Beds National Park				
DCCDP	Clara Barton Park	TXFDP	Fort Davis National Historic Site				
VACOP	Colonial National Historic Park	KSFLP	Fort Larned National Historic Site				
COCNP	Colorado National Monument	CAFPP	Fort Point National Historic Site				
SCCSP	Congaree Swamp National Monument	KSFSP	Fort Scott National Historic Site				
AZCOP	Coronado National Monument	SCFSP	Fort Sumter National Monument				
SCCWP	Cowpens National Monument	NMFUP	Fort Union National Monument				
ORCLP	Crater Lake National Park	NDFUP	Fort Union Trading Post National Historic Site				
IDCMP	Craters of the Moon National Monument	DCFWP	Fort Washington Park				
KYCGP	Cumberland Gap National Historic Park	WYFBP	Fossil Butte National Monument				
GACIP	Cumberland Island National Seashore	MAFRP	Frederick Law Olmsted National Historic Site				
СОССР	Curecanti National Recreation Area	VAFSP	Fredricksburg/Spotsylvania National Memorial Park				
OHCVP	Cuyahoga Valley National Park	PAFHP	Friendship Hill National Historic Site				
OHDBP	David Berger National Monument	FLFCP	Fort Caroline National Monument				
OHDAP	Dayton Aviation Heritage National Historic Park	ORFCP	Fort Clatsop National Monument				
CADVP	Death Valley National Park	TNFDP	Fort Donelson National Memorial Park				
PADWP	Delaware Water Gap National Recreation Area	GAFFP	Fort Frederica National Monument				
AKDEP	Denali National Park & Preserve	FLFJP	Fort Jefferson National Monument				
FLDNP	DeSoto National Monument	WYFLP	Fort Laramie National Historic Site				
CADPP	Devils Postpile National Monument	FLFMP	Fort Matanzas National Monument				
WYDTP	Devils Tower National Monument	MDFMP	Fort McHenry National Monument				
UTDSP	Dinosaur National Monument	PAFNP	Fort Necessity National Battlefield				
CODSP	Dinosaur National Park	GAFPP	Fort Pulaski National Monument				
FLDTP	Dry Tortugas National Park	NCFRP	Fort Raleigh National Historic Site				
AKEAP	Eastern Alaska Park Group	NYFOP	Ft. Sanwix National Monument				
WAELP	Ebey's Landing National Historical Reserve	ARFSP	Fort Smith National Historic Site				
NJEDP	Edison National Historic Site	WAFVP	Fort Vancouver National Historic Site				
IAEMP	Effigy Mounds National Monument	AKGAP	Gates of the Arctic National Park & Preserve				
NMEMP	El Malpais National Monument	NYGAP	Gateway National Recreation Area				
NMELP	El Morrow National Monument	INGRP	George Rogers Clark National Historic Park				
CAEOP	Eugene O'Neill National Historic Site	VAGWP	George Washington Birthplace National Monument				
FLEVP	Everglades National Park	MOGWP	George Washington Carver National Monument				
MIFMP	Father Marquette National Monument						
		•					

DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE (CONT'D)							
VAGMP	George Washington Memorial Parkway	AZHUP	Hubbell Trading Post National Historic Park				
PAGEP	Gettysburg National Memorial Park	WIIAP	Ice Age National Park				
NMGIP	Gila Cliff Dwellings National Monument	ILIMP	Illinois and Michigan Canal National Heritage Corridor				
AKGBP	Glacier Bay National Park & Preserve	PAINP	Independence National Historic Park				
MTGNP	Glacier National Park	INIDP	Indiana Dunes National Lakeshore				
UTGLP	Glen Canyon National Recreation Area	NDIPP	International Peace Gardens				
CAGNP	Golden Gate National Recreation Area	MIIRP	Isle Royale National Park				
UTGSP	Golden Spike National Historic Site	OHJGP	James A. Garfield National Historic Site				
AZGCP	Grand Canyon National Park	LAJEP	Jean Lafitte National Historic Park & Preserve				
MNGPP	Grand Portage National Monument	MOJEP	Jefferson National Expansion Memorial				
WYGTP	Grand Teton National Park	SDJCP	Jewel Cave National Monument				
MTGKP	Grant-Kohrs Ranch National Historic Site	GAJCP	Jimmy Carter National Historic Site				
NVGBP	Great Basin National Park	ORJDP	John Day Fossil Beds National Monument				
COGSP	Great Sand Dunes National Monument	MAJFP	John Fitzgerald Kennedy National Historic Site				
TNGSP	Great Smoky Mountains National Park	CAJMP	John Muir National Historic Site				
DCGRP	Greenbelt Park	PAJFP	Johnstown Flood National Monument				
TXGUP	Guadalupe Mountains National Park	CAJTP	Joshua Tree National Monument				
NCGIP	Guilford Courthouse National Memorial Park	HIKAP	Kalaupapa National Historic Park				
FLGIP	Gulf Island National Seashore	HIKHP	Kaloko-Hokohau National Historic Park				
IDHFP	Hagerman Fossil Beds National Monument	AKKAP	Katmai National Park & Preserve				
HIHKP	Haleakala National Park	AKKEP	Kenai Fjords National Park				
MDHAP	Hampton National Historic Site	GAKEP	Kennesaw Mountain National Battlefield Park				
DCHFP	Harpers Ferry National Historic Park	MIKWP	Keweenaw National Historic Park				
MOHTP	Harry S. Truman National Historic Site	SCKMP	Kings Mountain National Memorial Park				
HIHVP	Hawaii Volcanoes National Park	AKKLP	Klondike Gold Rush National Historic Park				
IAHHP	Herbert Hoover National Historic Site	WAKGP	Klondike Gold Rush National Historic Park-Seattle Unit				
NYFDP	Home of Franklin D. Roosevelt National Historic Site	NDKRP	Knife River Indian Villages National Historic Site				
NEHOP	Homestead National Monument	AKKOP	Kobuk Valley National Park				
OHHCP	Hopewell Culture National Historic Park	WALCP	Lake Chelan National Recreation Area				
PAHEP	Hopwell Furnace National Historic Site	AKLCP	Lake Clark National Park & Preserve				
ALHBP	Horseshoe Bend National Monument	NVLAP	Lake Mead National Recreation Area				
ARHOP	Hot Springs National Park	TXLAP	Lake Meredith National Recreation Area				
UTHOP	Hovenweep National Monument	WALRP	Lake Roosevelt National Recreation Area				

DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE (CONT'D)							
CALNP	Lassen Volcanic National Park	WVNRP	New River Gorge NR				
CABNP	Lava Beds National Monument	IDNPP	Nez Perce National Historic Park				
INLBP	Lincoln Boyhood National Monument	SCNIP	Ninety Six National Historic Site				
ILLHP	Lincoln Home National Historic Site	AKNOP	Noatak Preserve				
MTLBP	Little Bighorn Battlefield National Historic District	WANCP	North Cascades National Park				
ALLRP	Little River Canyon National Park	WINCP	North Country National Scenic Trail				
MALOP	Longfellow National Historic Site	TNOWP	Obed Wild & Scenic River				
MALWP	Lowell National Historic Park	GAOCP	Ocmulgee National Monument				
TXLYP	Lyndon B. Johnson National Historic Park	WAOLP	Olympic National Park				
KYMCP	Mammoth Cave National Park	OROCP	Oregon Caves National Monument				
VAMAP	Manassas National Battlefield Park	AZORP	Organ Pipe Cactus National Monument				
NYMAP	Manhattan Sites	MOOZP	Ozark National Scenic River				
VTMBP	Marsh–Billings–Rockefeller National Historic Park	TXPAP	Padre Island National Seashore				
GAMLP	Martin Luther King Junior National Historic Site	TXPBP	Palo Alto Battlefield National Historic Site				
NYMVP	Martin Van Buren National Historic Site	ARPEP	Pea Ridge National Memorial Park				
COMVP	Mesa Verde National Park	NMPEP	Pecos National Historic Park				
MAMIP	Minute Man National Historic Park	OHPVP	Perry's Victory & International Peace Memorial				
MNMSP	Mississippi National Recreation Area	VAPEP	Petersburg National Battlefield				
CAMNP	Mojave National Park	AZPFP	Petrified Forest National Park				
DCMOP	Monocacy National Battlefield	NMPGP	Petroglyphs National Monument				
AZMCP	Montezuma Castle National Monument	MIPRP	Pictured Rocks National Lakeshore				
NCMOP	Moores Creek National Battlefield Park	CAPIP	Pinnacles National Monument				
NJMOP	Morristown National Historic Park	MNPSP	Pipestone National Monument				
SDMRP	Mount Rushmore National Monument	DCPIP	Piscataway Park				
WAMRP	Mt. Rainier National Park	CARNP	Point Reyes National Seashore				
MSNHP	Natchez National Historical Park	LAPOP	Poverty Point National Monument				
MSNSP	Natchez Trace National Scenic Trail	CAPRP	Presidio of San Francisco				
MSNAP	Natchez Trace Parkway	VAPWP	Prince William Forest Park				
DCNPP	National Capitol Parks-Central	HIPHP	Puukohola Heiau National Historic Site				
DCNEP	National Capitol Parks-East	HIPUP	Puuohonua O Honaunau National Historic Park				
UTNBP	Natural Bridges National Monument	UTRAP	Rainbow Bridge National Monument				
AZNAP	Navajo National Monument	CARWP	Redwood National Park				
LANOP	New Orleans Jazz National Historic Park	VARIP	Richmond National Battlefield Park				

	DEPARTMENT OF INTERIOR, NA	TIONAL PAI	RK SERVICE (CONT'D)
DCRCP	Rock Creek Park	MDTSP	Thomas Stone National Historic Site
CORMP	Rocky Mountain National Park	UTTIP	Timpanogos Cave National Monument
RIROP	Roger Williams National Monument	FLTIP	Timucuan Ecological & Historic Preserve
MERCP	Roosevelt-Campabello International Park	AZTOP	Tonto National Monument
NYRVP	Roosevelt/Vanderbilt National Historic Site	AZTUP	Tumacacori National Monument
WARLP	Ross Lake National Recreation Area	MSTBP	Tupelo National Battlefield
ALRUP	Russell Cave National Monument	ALTAP	Tuskegee Airmen National Historic Site
NYSHP	Sagamore Hill National Historic Site	ALTUP	Tuskegee Institute National Historic Site
AZSAP	Saguaro National Park	AZTZP	Tuzigoot National Monument
WISCP	Saint Croix National Scenic River	HIUSP	U.S.S. Arizona Memorial
NYSPP	Saint Paul's Church National Historic Site	MOUGP	Ulysses S. Grant National Historic Site
NHSGP	Saint-Gaudens National Historic Site	NYUDP	Upper Delaware National Scenic & Recreational River
MASAP	Salem Maritime National Historic Site	PAVFP	Valley Forge National Historic Park
NMSAP	Salinas Pueblo Missions National Monument	MSVIP	Vicksburg National Memorial Park
VISRP	Salt River National Historic Park & Ecological Preserve	VIVIP	Virgin Islands National Park
TXSAP	San Antonio Missions National Historic Park	MNVOP	Voyageurs National Park
WASJP	San Juan Island National Historic Park	AZWAP	Walnut National Monument
PRSAP	San Juan National Historic Site	GUWPP	War in Pacific National Historic Park
CASMP	Santa Monica Mountains National Recreation Area	OKWBP	Washita Battlefield National Historic Site
NYSRP	Saratoga National Historic Park	CTWFP	Weir Farm National Historic Site
MASIP	Saugus Iron Works National Historic Site	AKWEP	Western Alaska Park Group
NESBP	Scotts Bluff National Monument	CAWNP	Whiskeytown National Recreation Area
CAKNP	Sequoia & Kings Canyon National Park	DCWHP	White House
VASHP	Shenandoah National Park	NMWHP	White Sands National Monument
TNSHP	Shiloh National Memorial Park	WAWMP	Whitman Mission National Historic Site
AKSIP	Sitka National Historic Park	OHWHP	William Howard Taft National Historic Site
MISDP	Sleeping Bear Dunes National Lakeshore	MOWCP	Wilson's Creek National Battlefield
MASPP	Springfield Armory National Historic Site	SDWCP	Wind Cave National Park
NYSTP	Statue of Liberty National Monument	VAWTP	Wolf Trap Farm Park
PASTP	Steamtown National Historic Site	NYWOP	Woman's Rights National Historic Park
TNSTP	Stones River National Battlefield	AKWSP	Wrangel-St. Elias National Park & Preserve
AZSUP	Sunset Crater Volcano	NCWRP	Wright Brothers National Monument
KSTGP	Tall Grass Prairie National Park	AZWUP	Wupatki National Monument
NDTRP	Theodore Roosevelt National Park	WYYNP	Yellowstone National Park

DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE (CONT'D)						
CAYNP	Yosemite National Park	AKYCP	Yukon-Charlie Rivers National Preserve			
COYHP	Yucca House National Monument	UTZIP	Zion National Park			

SECTION K

■ NFDRS Fuel Model at Origin

Definition

This data element identifies the type of wildland fuel involved in a wildland fire at the point of origin. The Fuel Model is a simulated fuel complex or description of various vegetative fuels and combinations of vegetative fuels. Fuel models were devised as a means of organizing information about vegetative fuels for use in the National Fire Danger Rating System (NFDRS) to predict fire danger. The local forester should be able to assist in identifying the fuel models in your area.

Purpose

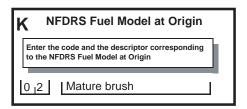
Fuel models were devised as a means for organizing the required wildland fuels information that is used in the NFDRS to predict the behavior of a potential wildfire.

Entry

Enter the two-digit NFDRS Fuel Model code and description that best identifies the type of wildland vegetation burned at the point of origin.

Example

The fire area consisted of mostly mature brush (02):NFDRS FUEL MODEL AT ORIGIN CODES



NFDRS FUEL MODEL AT ORIGIN CODES

- Fuel Model A—Annual grasses. This fuel model represents grasslands vegetated by annual grasses and forbs. Brush or trees may be present but are very sparse, occupying less than one-third of the area. Examples of types where Fuel Model A should be used are cheatgrass and medusahead. Open pinyon-juniper, sagebrush-grass, and desert shrub association may appropriately be assigned this fuel model if the woody plants meet the density criteria. The quantity and continuity of the ground fuels vary greatly with rainfall from year-to-year.
- Fuel Model B—Mature brush (6 feet or higher). Mature, dense fields of brush 6 feet (2 m) or more in height are represented by this fuel model. One-fourth or more of the aerial fuel in such stands is dead. Foliage burns readily. Model B fuels are potentially very dangerous, fostering intense, fast-spreading fires. This model is for California mixed chaparral generally 30 years or older. The B model is more appropriate for pure chamise stands. The B model may also be used for the New Jersey pine barrens.

- Fuel Model C—Open pine with grass. Open pine stands typify Model C fuels. Perennial grasses and forbs are the primary ground fuel, but there is enough needle litter and branchwood present to contribute significantly to the fuel loading. Some brush and shrubs may be present, but they are of little consequence. Situations covered by Fuel Model C are open, longleaf, slash, ponderosa, jeffrey, and sugar pine stands. Some pinyon-juniper stands may qualify.
- Fuel Model D—Southern rough. This fuel model is specifically for the palmetto-gallberry understory–pine overstory association of the southeast coastal plains. It can also be used for the so-called "low pocosins" where Fuel Model O might be too severe. This model should only be used in the Southeast because of a high moisture of extinction.
- Fuel Model E—Hardwood litter (fall). Use this model after leaf fall for hardwood and mixed hardwood–conifer types where the hardwoods dominate. The fuel is primarily hardwood leaf litter. The oak–hickory types are best represented by Fuel Model E, but E is an acceptable choice for northern hardwoods and mixed forests of the Southeast. In high winds, the fire danger may be underrated because rolling and blowing leaves are not taken into account. In the summer after the trees have leafed out, Fuel Model E should be replaced by Fuel Model R.
- Fuel Model F—Intermountain West brush. Model F represents mature closed chamise stands and oakbrush fields of Arizona, Utah, and Colorado. It also applies to young, closed stands and mature, open stands of California mixed chaparral. Open stands of pinyon-juniper are represented; however, fire activity will be overrated when windspeeds are low and where ground fuels are sparse.
- Fuel Model G—West Coast conifers; close, heavy down materials. Fuel Model G is used for dense conifer stands where there is a heavy accumulation of litter and downed woody material. Such stands are typically overmature and may also be suffering insect, disease, wind, or ice damage—natural events that create a very heavy buildup of dead material on the forest floor. The duff and litter are deep, and much of the woody material is more than 3 in (7.5 cm) in diameter. The undergrowth is variable, but shrubs are usually restricted to openings. Types meant to be represented by Fuel Model G are hemlock—Sitka spruce, coast douglas fir, and wind-thrown or bug-killed stands of lodgepole pine and spruce.
- Fuel Model H—Short-needle conifers; normal down woody materials. The short-needled conifers (white pines, spruces, larches, and firs) are represented by Fuel Model H. In contrast to Model G fuels, Fuel Model H describes a healthy stand with sparse undergrowth and a thin layer of ground fuels. Fires in H fuels are typically slow spreading and are dangerous only in scattered areas where the downed woody material is concentrated.
- Fuel Model I— Heavy slash, clear-cut conifers greater than 25 tons per acre. Fuel Model I was designed for clearcut conifer slash where the total loading of materials less than 6 in (15 cm) in diameter exceeds 25 tons per acre. After settling and the fines (needles and twigs) fall from the branches, Fuel Model I will overrate the fire potential. For lighter loadings of clearcut conifer slash, Fuel Model J should be used, and for light thinnings and partial cuts where the slash is scattered under a residual overstory, Fuel Model K should be used.
- Fuel Model J—Medium slash, heavily thinned conifers (less than 25 tons per acre). This model complements Fuel Model I. It is for clearcuts and heavily thinned conifer stands where the total loading of materials less than 6 in (15 cm) in diameter is less than 25 tons per acre. Again, as the slash ages, the fire potential will be overrated.
- Fuel Model K—Light slash (less than 15 tons per acre). Slash fuels from light thinnings and partial cuts in conifer stands are represented by Fuel Model K. Typically, the slash is scattered about under an open overstory. This model applies to hardwood slash and to southern pine clearcuts where the loading of all fuels is less than 15 tons per acre.
- Fuel Model L—Perennial grasses. This fuel model is meant to represent grasslands vegetated by perennial grasses. The principal species are coarser and the loading heavier than those in Model A fuels. Otherwise the situations are very similar; shrubs and trees occupy less than one-third of the area. The quantity of fuel in these areas is more stable from year-to-year. In sagebrush areas, Fuel Model T may be more appropriate.

- K
- Fuel Model N—Sawgrass, marsh needle-like grass. This fuel model was constructed specifically for the sawgrass prairies of south Florida. It may be useful in other marsh situations where the fuel is coarse and reedlike. The model assumes that one-third of the aerial portion of the plants is dead. Fast-spreading, intense fires can occur even over standing water.
- Fuel Model O—High pocosin. Fuel Model O applies to dense, brushlike fuels of the Southeast. O fuels, except for a deep litter layer, are almost entirely living, in contrast to B fuels. The foliage burns readily except during the active growing season. The plants are typically over 6 ft (2 m) tall and are often found under an open stand of pine. The high pocosins of the Virginia, North Carolina, and South Carolina coasts are the ideal of Fuel Model O. If the plants do not meet the 6-ft (2-m) criteria in those areas, Fuel Model D should be used.
- Fuel Model P—Southern long-needle pine. Closed, thrifty stands of long-needled southern pines are characteristic of P fuels. A 2- to 4-in (5- to 10-cm) layer of lightly compacted needle litter is the primary fuel. Some small-diameter branchwood is present, but the density of the canopy precludes more than a scattering of shrubs and grass. Fuel Model P has the high moisture of extinction characteristic of the Southeast. The corresponding model for other long-needled pines is U.
- Fuel Model Q—Alaska black spruce. Upland Alaskan black spruce is represented by Fuel Model Q. The stands are dense but have frequent openings filled with usually flammable shrub species. The forest floor is a deep layer of moss and lichens, but there is some needle litter and small-diameter branchwood. The branches persist on the trees, and ground fires easily reach into the tree crowns. This fuel model may be useful for jack pine stands in the Lake States. Ground fires are typically slow spreading, but a dangerous crowning potential exists.
- Fuel Model R—Hardwood litter (summer). This fuel model represents the hardwood areas after the canopies leaf out in the spring. It is provided as the off-season substitute for Fuel Model F. It should be used during the summer in all hardwood and mixed conifer—hardwood stands where more than half of the overstory is deciduous.
- Fuel Model S—Tundra. Alaskan or alpine tundra on relatively well-drained sites is the S fuel. Grass and low shrubs are often present, but the principal fuel is a deep layer of lichens and moss. Fires in these fuels are not fast spreading or intense, but are difficult to extinguish.
- Fuel Model T—Sagebrush with grass. The bothersome sagebrush-grass types of the Great Basin and the Intermountain West are characteristic of T fuels. The shrubs burn easily and are not dense enough to shade out grass and other herbaceous plants. The shrubs must occupy at least one-third of the site, or the A or L fuel models should be used. Fuel Model I might be used for immature scrub oak and desert shrub associations in the West and the scrub oak—wire grass type in the Southeast.
- Fuel Model U—Western long-needled pine. Closed stands of western long-needled pines are covered by this model. The ground fuels are primarily litter and small branchwood. Grass and shrubs are precluded by the dense canopy, but occur in the occasional natural opening. Fuel Model U should be used for ponderosa, Jeffrey, sugar, and red pine stands of the Lake States. Fuel Model P is the corresponding model for southern pine plantations.
- UU Undetermined.

SECTION L

This section collects demographic information on the person(s) who were responsible for the fire, whether it was intentionally set or started by an act of carelessness.

Person Responsible for Fire

Definition

The identification of whether a person (known or unknown) was responsible for the fire (either by carelessness or intent).

Purpose

This information can be used with other demographic information to identify and target fire prevention education or enforcement programs for specific audiences.

Entry

Check or mark the box that best describes the involvement of a person in causing the fire. If the person responsible for causing the fire is known, identifying information about the person can be entered in Block K1 of the Basic Module or the Supplemental Form (NFIRS–1S).

■ If a person was identified as having caused the fire, complete Blocks L2–L4.

Example

A wildland fire resulted from the ignition of a pan full of grease that had been left unattended on a camping stove by a man (1) who was subsequently questioned by investigators:

L ₁	Person Responsible for Fire
2 <u> </u>	Identified person caused fire Unidentified person caused fire Fire not caused by person on identified, complete the rest of Section L

PERSON RESPONSIBLE FOR FIRE CODES

- 1 Identified person caused fire.
- 2 Unidentified person caused fire.
- 3 Fire not caused by person.

Gender of Person Involved

Definition

The gender of the person responsible for the fire (either by carelessness or intent).

Purpose

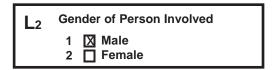
Information on the gender of persons involved can be used with other demographic information to identify fire problems in certain segments of the population, and to target fire prevention and fire safety programs for certain audiences.

Entry

Check or mark the box that describes the gender of the person responsible for the fire.

Example

The wildland fire was started when a young boy (1) set a fire in the woods:



GENDER CODES

- 1 Male.
- 2 Female.

Age or Date of Birth

Enter either the age or date of birth of the person identified as being responsible for the fire (either by carelessness or intent). Do not enter both.

Age

Definition

The age of the person identified as being responsible for the fire.

Purpose

This information can be used with other demographic information to identify fire problems in certain segments of the population and to target fire prevention and fire safety programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends, when used in combination with Age Was a Factor (Block D2) and Gender of Person Involved (Block L2).

Entry

Enter the age of the person responsible for the fire. Estimate the age if it cannot be determined.

Example

The boy who started the fire was 10 years old:

Example on next page

L





Date of Birth

Definition

The month, day, and year of the birth of the person responsible for the fire.

Purpose

This information is an alternative to Age, which can be used with other demographic information to identify fire problems in certain segments of the population and to target fire prevention and fire safety programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends, when used in combination with Age Was a Factor (Block D2) and Gender of Person Involved (Block L2).

This data element is used as an alternate method for calculating the casualty's age. Age is collected in NFIRS but Date of Birth is not.

Entry

Enter the date of birth of the person responsible for the fire showing month, day, and year (mm/dd/yyyy).

Example

The person responsible for the fire was born on November 18, 1993:



Activity of Person Involved

Definition

Describes the primary activity of the person who was responsible for the fire.

Purpose

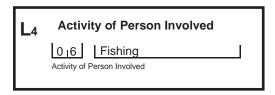
Prevention programs and strategy development on wildland areas are of utmost importance in continuing education on fire behavior. Collecting information on the primary activity of the person involved will assist in developing programs that will better address the needs of each activity.

Entry

Enter the two-digit code and description of the activity of the person involved. This entry should report the primary activity of the person who caused the fire.

Example

The fisherman's (6) discarded match ignited the dry brush:



ACTIVITY OF PERSON INVOLVED CODES

- 01 Logging/Timber harvest.
- 02 Management activities.
- 03 Construction/Maintenance.
- 04 Social gathering.
- 05 Hunting.
- 06 Fishing.
- 07 Other recreation.
- 08 Camping.
- 09 Other permitted harvest.
- 10 Picnicking.
- 11 Non-permitted harvest.
- 12 Harvest of illegal material.
- 13 Religious or ceremonial activity.
- 14 Oil/Gas production.
- 15 Military operations.
- 16 Subsistence.
- 17 Mining.
- 18 Livestock grazing.
- 19 Target practice.
- 20 Blasting.
- 21 Fireworks use.
- 00 Activity of person involved, other.

SECTION M

■ Type of Right-of-Way

This data field is completed only for fires starting on or near (within 99 feet) roads, railroads, or power line rights-of-way.

Definition

This refers to the horizontal distance between the point of fire origin from the edge of the traveled surface of a road or the nearest outside rail of a railroad right-of-way, or from the nearest power line or power transmission equipment of a utility right-of-way.

This section contains two data elements: (1) the actual measured or estimated horizontal distance (to the nearest foot, up to 99 feet) of the point of fire origin from the right-of-way; and (2) a description of the type of right-of-way on or near where the fire started.

Purpose

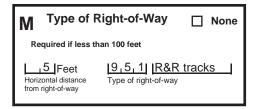
Aggregate data about horizontal distances from rights-of-way provide information necessary to assess the risks of certain hazards and to develop hazard reduction strategies such as regulations for controlling combustible fuels along roads and other rights-of-way.

Entry

Enter the actual measured or estimated horizontal distance (to the nearest foot, up to 99 feet) of the point of fire origin from the right-of-way and the three-digit code and description of the right-of-way. If there is no right-of-way 100 or more feet from the fire origin, check or mark the None box.

Example

A fire starts in brush located 5 feet from railroad tracks (951):



TYPE OF RIGHT-OF-WAY CODES

- 919 Dump, sanitary landfill.
- 921 Bridge, trestle.
- 922 Tunnel.
- 926 Outbuilding. Excludes garage.
- 931 Open land, field.
- 935 Campsite with utilities.
- 936 Vacant lot.
- 938 Graded and cared-for plots of land.
- 940 Water area.
- 951 Railroad right-of-way.
- 952 Railroad yard.
- 960 Street, other.
- 961 Highway or divided highway.
- 962 Residential street, road, or residential driveway.
- 963 Street or road in commercial area.
- 965 Vehicle parking area.
- 972 Aircraft runway.
- 973 Aircraft taxiway.
- 974 Aircraft loading area.
- 981 Construction site.
- 982 Oil, gas field.
- 983 Pipeline, power line, or other utility right-of-way.
- 984 Industrial plant yard, area.
- 000 Type of right-of-way, other.
- UUU Undetermined.
- NNN None.

SECTION N

■ Fire Behavior

These optional descriptors refer to observations made at the point of initial attack. Use of these descriptors will most likely be limited to local, State, and Federal wildland management agencies that are trained in making such observations.

This section describes the topographical features and fire characteristics that contributed to the fire behavior. Information about fire behavior is used in fire modeling to assess the potential for ignition and rate of spread for different fuels under various conditions.

Elevation

Definition

Elevation refers to the numeric representation of the distance from mean sea level to the wildland fire, measured in feet.

Purpose

Aggregate data on the distance from sea level may provide information necessary to assess the risks and hazards of wildland fires at different elevations.

Entry

Enter the distance from mean sea level measured in feet. See completed example at the end of Section N.

Relative Position on Slope

Definition

This observation indicates a point location's relative position on a slope.

Purpose

Aggregate data on the relative position on a slope, combined with wind and weather information, may provide information necessary to assess the risks and hazards of wildland fires at different positions.

Entry

Enter the appropriate code and description of the relative position on the slope. See completed example at the end of Section N.

RELATIVE POSITION ON SLOPE CODES

- 0 Valley bottom.
- 1 Lower slope.
- 2 Mid slope.
- 3 Upper slope.
- 4 Ridge top.

Aspect

Definition

Aspect is the general direction that a given slope faces.

Purpose

Aggregate data on the general direction a given slope faces, combined with wind and weather information, may provide information necessary to assess the risks and hazards of wildland fires at different aspects.

Entry

Enter the appropriate code and description of the general direction that a given slope faces. See completed example at the end of Section N.

ASPECT CODES

- 0 Flat/None.
- 1 Northeast.
- 2 East.
- 3 Southeast.
- 4 South.
- 5 Southwest.
- 6 West.
- 7 Northwest.
- 8 North.

Flame Length

Definition

This observation refers to the distance between the flame tip and midpoint of the flame depth at the base of the flame (generally the ground surface), measured in feet.

Entry

Enter the flame length in feet. See completed example at the end of Section N.

Rate of Spread

Definition

This is a measurement of the approximate rate of forward spread of a fire front, expressed in chains per hour.

The length of a chain is 66 feet (20.1 meters). The term is derived from a surveying instrument consisting of 100 links of metal.

Entry

Enter the approximate rate of spread in chains per hour.

M

Example

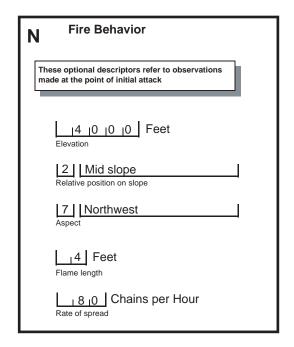
Elevation of 4,000 feet above sea level.

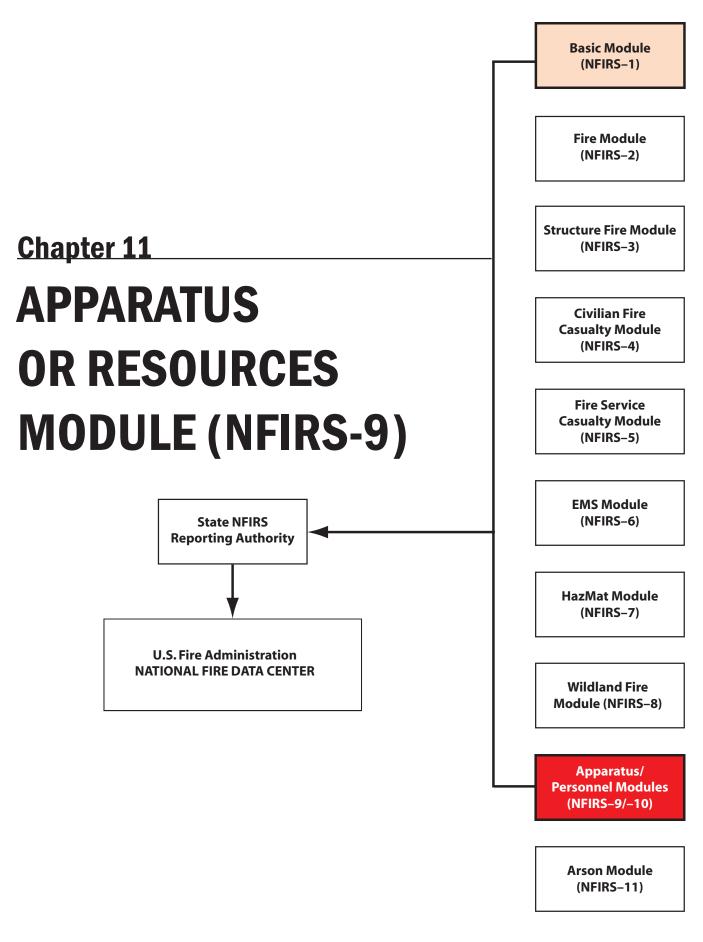
At the time of observation, the fire was mid slope (2).

The slope faced the northwest (7).

The flame was 4 feet in length.

Extreme fire behavior: spotting and crowing with a rate of spread of 80 chains per hour.





A LLL Sta	MM DD YYYY e Mincident Date Station	I I Incident Nun	nber 💸	□ De Exposure	A mmaratus ar
B Apparatus or Resources Use codes listed below	Dates and Times Check if same date as Alarm date on the Basic Module (Block E1). Month Day Year Hour/Min	Sent	Number of ☆ People	Apparatus Use Check ONE box for each apparatus to indicate its main use at the incident.	Actions Taken List up to 4 actions for each apparatus.
1 ID L	Dispatch		لبنا	Suppression EMS Other	
2 ID	Dispatch		لبيا	Suppression EMS Other	
3 ID L	Dispatch		لبيا	Suppression EMS Other	
4 ID	Dispatch		لبنا	☐ Suppression ☐ EMS ☐ Other	
5 ID	Dispatch		لبيا	Suppression EMS Other	
6 ID	Dispatch		لبنا	Suppression EMS Other	
7 ID L	Dispatch		لبيا	Suppression EMS Other	
8 ID	Dispatch		لبنا	Suppression EMS Other	
9 ID	Dispatch		لبنا	Suppression EMS Other	
Apparatus or Resource Type Ground Fire Suppression 41 Aircraft 42 Helitanker 43 Helicopter 43 Quint 44 Aircraft, other 45 Aircraft, other 46 Aircraft, other 47 ARFF (aircraft rescue and firefighting) 48 Aircraft 49 Aircraft 40 Aircraft 40 Aircraft 51 Fire boat with pump			Medical and Rescue 71 Rescue unit 72 Urban search and rescue unit 73 High-angle rescue unit 75 BLS unit 76 ALS unit 70 Medical and rescue unit, other		More apparatus? Use additional sheets.
10 Ground fire suppressi Heavy Ground Equipment 21 Dozer or plow 22 Tractor 24 Tanker or tender 20 Heavy ground equipm	on, other 52 Boat, no pump 50 Marine equipment, other Support Equipment 61 Breathing apparatus support 62 Light and air unit				NN None UU Undetermined NFIRS-9 Revision 01/01/04

CHAPTER 11 <u>APPARATUS OR RESOURCES MODULE (NFIRS-9)</u>

The Apparatus or Resources Module (NFIRS–9) is an optional module that is used to help manage and track apparatus and resources used on incidents.

■ If both apparatus and personnel need to be reported, use the Personnel Module (NFIRS-10) instead of this module.

SECTION A

The guidance and directions for completing Section A of the Apparatus or Resources Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Apparatus or Resources Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

■ Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date A

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🏠

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number

Entry

If this report is for an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition

Indicates a change to information submitted on a previous Apparatus or Resources Module or a deletion of all information regarding the incident.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this Apparatus or Resources Module and now want to have the data on this report deleted from the database. If this box is marked, complete Section A and the ID Number from Section B and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Apparatus or Resources Type

Definition

The type and identification number for the apparatus or resources used at the incident.

The apparatus Type field is a required field; complete the ID number of the resource or apparatus if appropriate.

Purpose

This information is useful in determining actual apparatus or resource requirements for different types of incidents and for different levels of incident severity as well as for tracking times and actions taken by apparatus or resource type.



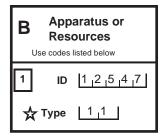
Entry

Enter the identification number for each apparatus or resource used at the incident and the two-digit code for the type of apparatus or resource. If more than nine apparatus or resources were used, complete an additional NFIRS-9 module.

Individual fire departments often assign a unique number to each piece of apparatus in the department.

Example

An engine (11) responded to the incident. Its assigned identification number is 12547:



APPARATUS OR RESOURCE TYPE CODES

Ground Fire Suppression

- 11 Engine.
- 12 Truck or aerial.
- 13 Quint.
- 14 Tanker and pumper combination.
- 16 Brush truck.
- 17 ARFF (aircraft rescue and firefighting).
- 10 Ground fire suppression, other.

Heavy Ground Equipment

- 21 Dozer or plow.
- 22 Tractor.
- 24 Tanker or tender.
- Heavy ground equipment, other.

Aircraft

- 41 Aircraft, fixed-wing tanker.
- 42 Helitanker.
- 43 Helicopter.
- 40 Aircraft, other.

Marine Equipment

- Fire boat with pump.
- Boat, no pump.
- Marine equipment, other.

Support Equipment

- 61 Breathing apparatus support.
- 62 Light and air unit.
- 60 Support apparatus, other.

Medical and Rescue Unit

- 71 Rescue unit.
- 72 Urban search and rescue unit.
- 73 High-angle rescue unit.
- 75 BLS unit.
- 76 ALS unit.
- 70 Medical and rescue unit, other.

Other

- 91 Mobile command post.
- 92 Chief officer car.
- 93 HazMat unit.
- 94 Type I hand crew.
- 95 Type II hand crew.
- 99 Privately owned vehicle.
- 00 Other apparatus or resources.
- NN None.
- UU Undetermined.

Dates and Times

All dates and time are entered as numerals. For time of day, the 24-hour clock is used. (Midnight is 0000.)

Dispatch Time

Definition

The actual month, day, year, and time of day when this unit was dispatched by the communications center. This is not an elapsed time.

Purpose

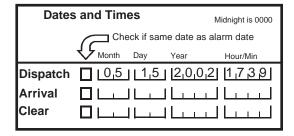
The time when a unit is dispatched is valuable because it allows fire department management to calculate the time it took from dispatch to arrival of the apparatus or resource on the incident scene. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the unit was dispatched. If the Dispatch date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time the unit was dispatched.

Example

The call was dispatched at 5:39 p.m. on May 15, 2002, which was the same date as the Alarm date. The respondent elected to enter the date rather than check the box:





Arrival Time

Definition

The actual month, day, year, and time of day when this unit arrived at the incident scene. This is not an elapsed time.

Purpose

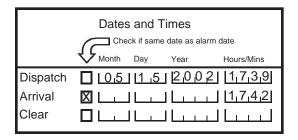
The time when a specific unit arrives at the scene is valuable to fire department management because it reflects the actual time spent traveling to the scene of the incident for that type of apparatus or resource. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the fire department unit arrived on the scene. If the Arrival date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time the unit arrived.

Example

Engine 13 arrived at the scene at 5:42 p.m. on May 15, 2002:



Clear Time

Definition

The actual month, day, year, and time of day when this unit is cleared from the incident and is available for new duty.

Usually, the Clear time represents when the apparatus or resources are cleared from the scene. In the case of transport of a casualty, however, the Clear time is when the apparatus completes the transport and is available for new duty.

Purpose

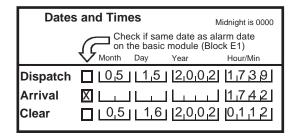
The time when the resources or apparatus are cleared is valuable to fire department management because it reflects the time spent stabilizing the incident. This assists in determining service demand and costs for resource allocation.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the units cleared the incident and are available for reassignment. If the Clear date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time that the unit is cleared from the incident.

Example

Engine 13 cleared the scene and was available for reassignment at 1:12 a.m. on May 16, 2002:



Sent

Definition

Indicates which apparatus was sent on the incident. Fire departments can pre-print or pre-enter apparatus in this module. When an incident occurs, the firefighter completing the module can check or mark the Sent box to indicate which apparatus in the module actually responded.

Purpose

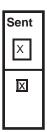
Fire departments can pre-print or pre-enter apparatus in the module.

Entry

Check or mark the Sent box if the apparatus responded to the incident.

Example

The apparatus was sent on the call:



Number of People ☆

Definition

The number of emergency personnel on the apparatus.

Purpose

This assists in determining personnel demands for different types of incidents and staffing requirements for apparatus.

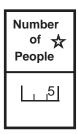


Entry

Enter the number of personnel on the apparatus.

Example

Five personnel rode the squad:



Apparatus or Resources Use ☆

Definition

The main use of the apparatus or resource at the incident.

Purpose

This information is useful in determining actual personnel and apparatus requirements for different types of incidents and for different levels of incident severity.

Entry

Check or mark the box that best describes the primary use of the apparatus or resource at the incident.

Chief officer vehicles and privately owned vehicles should be classified as Other.

Example

The engine and its personnel were responsible for suppression activities:



APPARATUS USE CODES

- 1 Suppression.
- 2 EMS
- 0 Other. Actions Taken

В

Actions Taken

Definition

The duties performed at the incident scene by the apparatus or resource personnel.

Purpose

This data element, together with Incident Type on the Basic Module (Section C), enables a fire department to document the breadth of activities and the resources required by the responding fire department to effectively handle the range of emergency situations. This information also provides some indication on the specific types of service required of the fire department.

Entry

Enter the two-digit code(s) for up to four actions taken by the specific piece of apparatus or resource at the scene of the incident. Always report the most significant actions taken before less significant actions taken. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service. Be as specific as possible in stating the actions taken.

Example

The truck company ventilated the roof (51), forced entry (52), and overhauled the fire scene (12):



ACTIONS TAKEN CODES

Fire Control or Extinguishment

- 11 Extinguishment by fire service personnel.
- 12 Salvage and overhaul.
- Establish fire lines around wildfire perimeter. Includes clearing firebreaks using direct, indirect, and burnout tactics as appropriate.
- 14 Contain fire (wildland). Includes taking suppression action that can reasonably be expected to check the fire spread under prevailing and predicted conditions.
- 15 Confine fire (wildland). Includes when fire crews or resources stop the forward progress of a fire but have not put in all control lines.
- 16 Control fire (wildland). Includes when fire crews or resources completely surround the fire perimeter with control lines; extinguish any spot fires; burn any area adjacent to the fire side of the control lines; and cool down all hot spots that are immediate threats to the control line, until the lines can reasonably be expected to hold under foreseeable conditions.
- 17 Manage prescribed fire (wildland).
- 10 Fire control or extinguishment, other.

Search and Rescue

- 21 Search for lost or missing person. Includes animals.
- Rescue, remove from harm. Excludes vehicle extrication (23).
- 23 Extrication or disentangling of a person. Excludes body recovery (24).
- 24 Recover body or body parts.
- 20 Search and rescue, other.

EMS and Transport

- Provide first aid and check for injuries. Medical evaluation of patient.
- 32 Provide basic life support (BLS).
- 33 Provide advanced life support (ALS).
- 34 Transport of person from scene in fire service ambulance or apparatus.
- 30 Emergency medical services, other.

Hazardous Condition

- 41 Identification, analysis of hazardous materials.
- Hazardous materials detection, monitoring, sampling, and analyzing using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.
- Hazardous materials spill control and confinement. Includes confining or diking hazardous materials. These are actions taken to confine the product released to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.
- Hazardous materials leak control and containment. Includes actions taken to keep a material within its container, such as plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.
- 45 Remove hazard. Includes neutralizing a hazardous condition.
- Decontaminate persons or equipment. Includes actions taken to prevent the spread of contaminants from the "hot zone" to the "cold zone." This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.
- Decontamination of occupancy or area exposed to hazardous materials.
- 48 Remove hazardous materials. Includes a broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.
- 40 Hazardous condition, other.

Fires, Rescues, and Hazardous Conditions

- Ventilate. Includes nonhazardous odor removal and removal of smoke from nonhazardous materials-related fires.
- Forcible entry, performed by fire service. Includes support to law enforcement.
- Evacuate area. Removal of civilians from an area determined to be hazardous. Includes actions taken to isolate the contaminated area and/or evacuate those persons affected by a hazardous materials release or potential release.
- Determine if the materials released are nonhazardous through product identification and environmental monitoring.
- Establish safe area. Includes isolating the area affected by denying entry to unprotected persons and establishing hazard control zones (hot, warm, cold).
- 56 Provide air supply.
- 57 Provide light or electrical power.
- 58 Operate apparatus or vehicle.
- Fires, rescues, and hazardous conditions, other.

Systems and Services

- Restore municipal services. Includes turning water back on and notifying the gas company to turn the gas on.
- Restore sprinkler or fire protection system.
- 63 Restore fire alarm system. Includes restoring fire alarm systems monitored by the fire service.
- 64 Shut down system. Includes shutting down water, gas, and fire alarm systems.

- В
- 65 Secure property. Includes property conservation activities such as covering broken windows or holes in roofs.
- Remove water or control flooding condition.
- 60 Systems and services, other.

Assistance

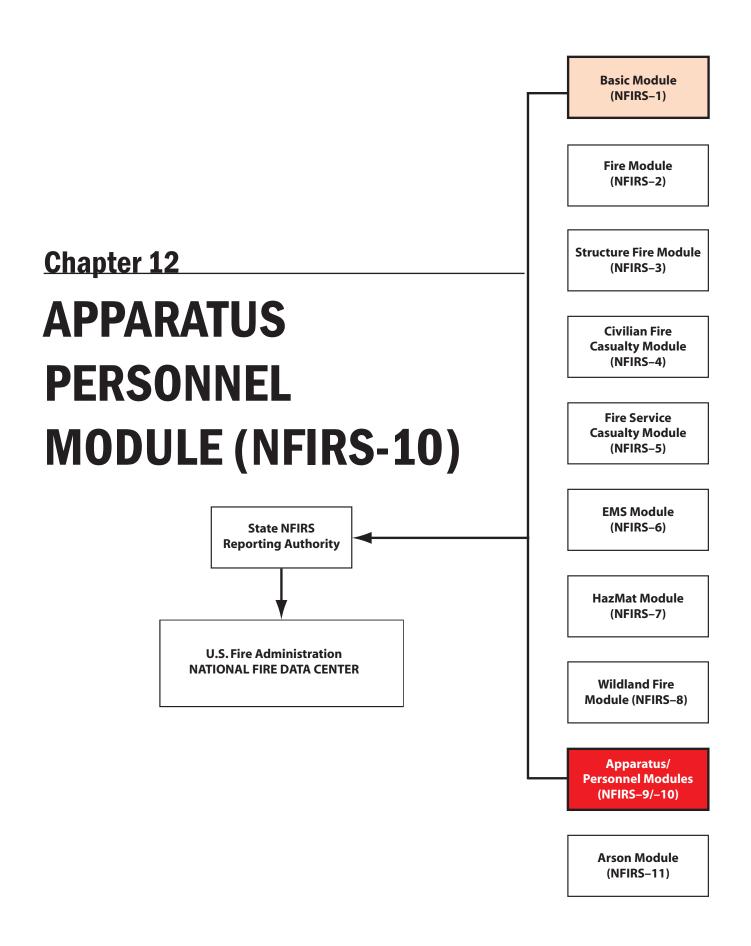
- Assist physically disabled. Includes providing nonmedical assistance to physically disabled, handicapped, or elderly citizens.
- Assist animal. Includes animal rescue, extrication, removal, or transport.
- Provide manpower. Includes providing manpower to assist rescue/ambulance units lift patients or providing manpower to assist police.
- 74 Provide apparatus.
- 75 Provide equipment, where equipment is used by another agency.
- Provide water. Includes tanker shuttle operations and pumping in a relay or from a water source. Excludes normal fire suppression operations.
- 77 Control crowd. Includes restricting pedestrian access to an area. Excludes control of vehicles (78).
- 78 Control traffic. Includes setting up barricades and directing traffic.
- Assess damage from severe weather or the results of a natural disaster.
- 70 Assistance, other.

Information, Investigation, and Enforcement

- 81 Incident command. Includes providing support to incident command activities.
- Notify other agencies. Includes notifications of utility companies, property owners, and the like.
- Provide information to the public or media.
- 84 Refer to proper authority. Includes turnover of incidents to other authorities or agencies such as the police.
- 85 Enforce fire code and other codes. Includes response to public complaints and abatement of code violations.
- Investigate. Includes investigations done on arrival to determine the situation and post-incident investigations; and collecting incident information for incident reporting purposes.
- 80 Information, investigation, and enforcement, other.

Fill-in, Standby

- 90 Fill-in, standby, other.
- Fill in, move up to another fire station.
- 92 Standby.
- 93 Canceled en route.
- 00 Action taken, other.



A L State	MM DD YYYY Incident Date	Station In	I I I	<u> </u>	Exposure 🖈	_	NFIRS-10 Personnel
B Apparatus or Resources	Dates and Times Check if same date as Ala the Basic Module (Block E Month Day Year		Sent	Number of ☆ People	Apparatus Use Check ONE box for ea apparatus to indicate i use at the incident.	ch List up to	ons Taken o 4 actions for paratus and rsonnel.
_	Dispatch		Sent	لبيا	Suppressi	on	_
Personnel ☆ ID	Name	Rank or Grade	Attend x	Action Taken	Action Taken	Action Taken	Action Taken
	<u>]</u>						
	Dispatch		Sent	لبنا	Suppressi EMS Other	ion	
Personnel 🛧	Name	Rank or Grade	Attend	Action Taken	Action Taken	Action Taken	Action Taken
	Dispatch	لسيا ا	Sent	لبيا	Suppressi	on	
Personnel 🛧	Name	Rank or Grade	Attend	Action Taken	Action Taken	Action Taken	Action Taken
						<u> </u>	
<u> </u>	<u> </u>						1

NFIRS-10 Revision 01/01/04

CHAPTER 12 PERSONNEL MODULE (NFIRS-10)

The Personnel Module (NFIRS-10) is an optional module that is used to help manage and track personnel and resources used on incidents.

If only apparatus or resources need to be reported, use the Apparatus or Resources Module (NFIRS-9) instead of this module.

SECTION A

The guidance and directions for completing Section A of the Personnel Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Personnel Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

□ Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date A

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🏠

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number \$\frac{1}{2}\$

Entry

If this report is for an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition

Indicates a change to information submitted on a previous Personnel Module or a deletion of all information regarding the incident.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this Personnel Module and now want to have the data on this report deleted from the database. If this box is marked, complete Section A and the ID Number from Section B and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Apparatus or Resources Type

Definition

The type and identification number for the apparatus or resources used at the incident.

The apparatus Type field is a required field; complete the ID number of the resource or apparatus if appropriate.

Purpose

This information is useful in determining actual apparatus and personnel requirements for different types of incidents and for different levels of incident severity as well as for tracking times and actions taken by apparatus type and personnel.



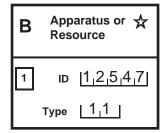
Entry

Enter the identification number for each apparatus or resource used at the incident and the two-digit code for the type of apparatus or resource. If more than three apparatus or resources were used, complete an additional NFIRS-10 module.

Individual fire departments often assign a unique number to each piece of apparatus in the department.

Example

An engine (11) responded to the incident. Its assigned identification number is 12547:



APPARATUS OR RESOURCE TYPE CODES

Ground Fire Suppression

- 11 Engine.
- 12 Truck or aerial.
- 13 Quint.
- 14 Tanker and pumper combination.
- 16 Brush truck.
- 17 ARFF (aircraft rescue and firefighting).
- 10 Ground fire suppression, other.

Heavy Ground Equipment

- 21 Dozer or plow.
- 22 Tractor.
- 24 Tanker or tender.
- Heavy ground equipment, other.

Aircraft

- 41 Aircraft, fixed-wing tanker.
- 42 Helitanker.
- 43 Helicopter.
- 40 Aircraft, other.

Marine Equipment

- Fire boat with pump.
- Boat, no pump.
- 50 Marine equipment, other.

Support Equipment

- Breathing apparatus support.
- 62 Light and air unit.
- 60 Support apparatus, other.

Medical and Rescue Unit

- 71 Rescue unit.
- 72 Urban search and rescue unit.
- 73 High-angle rescue unit.
- 75 BLS unit.
- 76 ALS unit.
- 70 Medical and rescue unit, other.

Other

- 91 Mobile command post.
- 92 Chief officer car.
- 93 HazMat unit.
- 94 Type I hand crew.
- 95 Type II hand crew.
- 99 Privately owned vehicle.
- 00 Other apparatus or resources.
- NN None.
- UU Undetermined.

Dates and Times

All dates and time are entered as numerals. For time of day, the 24-hour clock is used. (Midnight is 0000.)

Dispatch Time

Definition

The actual month, day, year, and time of day when this unit was dispatched by the communications center. This is not an elapsed time.

Purpose

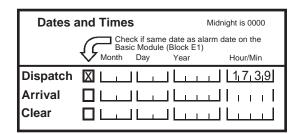
The time when a unit is dispatched is valuable because it allows fire department management to calculate the time it took from dispatch to arrival of the apparatus or resource on the incident scene. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the unit was dispatched. If the Dispatch date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box.

Example

The call was dispatched at 5:39 p.m. on May 15, 2002, the same date as the Alarm date:





Arrival Time

Definition

The actual month, day, year, and time of day when this unit arrived at the incident scene. This is not an elapsed time.

Purpose

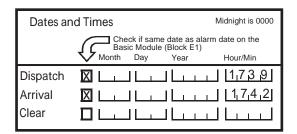
The time when a specific unit arrives at the scene is valuable to fire department management because it reflects the actual time spent traveling to the scene of the incident for that type of apparatus or resource. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the fire department unit arrived on the scene. If the Arrival date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time the unit arrived.

Example

Engine 13 arrived at the scene at 5:42 p.m. on May 15, 2002:



Clear Time

Definition

The actual month, day, year, and time of day when this unit is cleared from the incident and is available for new duty.

Usually, the Clear time represents when the apparatus or resources are cleared from the scene. In the case of transport of a casualty, however, the Clear time is when the apparatus completes the transport and is available for new duty.

Purpose

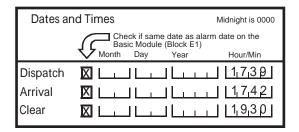
The time when the resources or apparatus are cleared is valuable to fire department management because it reflects the time spent stabilizing the incident. This assists in determining service demand and costs for resource allocation.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the units cleared the incident and are available for reassignment. If the Clear date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time that the unit is cleared from the incident.

Example

Engine 13 cleared the scene and was available for reassignment at 7:30 p.m. on May 15, 2002:



Sent

Definition

Indicates which apparatus was sent on the incident. Fire departments can pre-print or pre-enter apparatus in this module. When an incident occurs, the firefighter completing the module can check or mark the Sent box to indicate which apparatus in the module actually responded.

Purpose

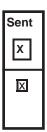
Fire departments can pre-print or pre-enter apparatus in the module.

Entry

Check or mark the Sent box if the apparatus responded to the incident.

Example

The apparatus was sent on the call:



Number of People ☆

Definition

The number of emergency personnel on the apparatus.

Purpose

This assists in determining personnel demands for different types of incidents and staffing requirements for apparatus.

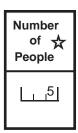


Entry

Enter the number of personnel on the apparatus.

Example

Five personnel rode the squad:



Apparatus or Resource Use ☆

Definition

The main use of the apparatus or resource at the incident.

Purpose

This information is useful in determining actual personnel and apparatus requirements for different types of incidents and for different levels of incident severity.

Entry

Check or mark the box that best describes the primary use of the apparatus or resource at the incident.

Chief officer vehicles and privately owned vehicles should be classified as Other.

Example

The engine and its personnel were responsible for suppression activities:



APPARATUS USE CODES

- 1 Suppression.
- 2 EMS.
- 3 Other.

В

Actions Taken

Definition

The duties performed at the incident scene by the apparatus or resource personnel.

Purpose

This data element, together with Incident Type on the Basic Module (Section C), enables a fire department to document the breadth of activities and the resources required by the responding fire department to effectively handle the range of emergency situations. This information also provides some indication on the specific types of service required of the fire department.

Entry

Enter the two-digit code(s) for up to four actions taken by the specific piece of apparatus or resource at the scene of the incident. Always report the most significant actions taken before less significant actions taken. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service. Be as specific as possible in stating the actions taken.

Example

The truck company ventilated the roof (51), forced entry (52), and overhauled the fire scene (12):



ACTIONS TAKEN CODES

Fire Control or Extinguishment

- 11 Extinguishment by fire service personnel.
- 12 Salvage and overhaul.
- Establish fire lines around wildfire perimeter. Includes clearing firebreaks using direct, indirect, and burnout tactics as appropriate.
- 14 Contain fire (wildland). Includes taking suppression action that can reasonably be expected to check the fire spread under prevailing and predicted conditions.
- 15 Confine fire (wildland). Includes when fire crews or resources stop the forward progress of a fire but have not put in all control lines.
- 16 Control fire (wildland). Includes when fire crews or resources completely surround the fire perimeter with control lines; extinguish any spot fires; burn any area adjacent to the fire side of the control lines; and cool down all hot spots that are immediate threats to the control line, until the lines can reasonably be expected to hold under foreseeable conditions.
- 17 Manage prescribed fire (wildland).
- Fire control or extinguishment, other.

Search and Rescue

- 21 Search for lost or missing persons. Includes animals.
- Rescue, remove from harm. Excludes vehicle extrication (23).
- 23 Extrication or disentangling of a person. Excludes body recovery (24).
- 24 Recover body or body parts.
- 20 Search and rescue, other.

EMS and Transport

- 31 Provide first aid and check for injuries. Medical evaluation of patient.
- 32 Provide basic life support (BLS).
- 33 Provide advanced life support (ALS).
- Transport of person from scene in fire service ambulance or apparatus.
- 30 Emergency medical services, other.

Hazardous Condition

- 41 Identification, analysis of hazardous materials.
- Hazardous materials detection, monitoring, sampling, and analyzing using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.
- Hazardous materials spill control and confinement. Includes confining or diking hazardous materials. These are actions taken to confine the product released to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.
- Hazardous materials leak control and containment. Includes actions taken to keep a material within its container, such as plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.
- 45 Remove hazard. Includes neutralizing a hazardous condition.
- Decontaminate persons or equipment. Includes actions taken to prevent the spread of contaminants from the "hot zone" to the "cold zone." This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.
- Decontamination of occupancy or area exposed to hazardous materials.
- 48 Remove hazardous materials. Includes a broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.
- 40 Hazardous condition, other.

Fires, Rescues, and Hazardous Conditions

- Ventilate. Includes nonhazardous odor removal and removal of smoke from nonhazardous materials-related fires.
- Forcible entry, performed by fire service. Includes support to law enforcement.
- Evacuate area. Removal of civilians from an area determined to be hazardous. Includes actions taken to isolate the contaminated area and/or evacuate those persons affected by a hazardous materials release or potential release.
- Determine if the materials released are nonhazardous through product identification and environmental monitoring.
- Establish safe area. Includes isolating the area affected by denying entry to unprotected persons and establishing hazard control zones (hot, warm, cold).
- 56 Provide air supply.
- 57 Provide light or electrical power.
- 58 Operate apparatus or vehicle.
- Fires, rescues, and hazardous conditions, other.

Systems and Services

- 61 Restore municipal services. Includes turning water back on and notifying the gas company to turn the gas on.
- Restore sprinkler or fire protection system.

- В
- 63 Restore fire alarm system. Includes restoring fire alarm systems monitored by the fire service.
- 64 Shut down system. Includes shutting down water, gas, and fire alarm systems.
- 65 Secure property. Includes property conservation activities such as covering broken windows or holes in roofs.
- Remove water or control flooding condition.
- 60 Systems and services, other.

Assistance

- Assist physically disabled. Includes providing nonmedical assistance to physically disabled, handicapped, or elderly citizens.
- Assist animal. Includes animal rescue, extrication, removal, or transport.
- Provide manpower. Includes providing manpower to assist rescue/ambulance units lift patients or providing manpower to assist police.
- 74 Provide apparatus.
- Provide equipment, where equipment is used by another agency.
- Provide water. Includes tanker shuttle operations and pumping in a relay or from a water source. Excludes normal fire suppression operations.
- 77 Control crowd. Includes restricting pedestrian access to an area. Excludes control of vehicles (78).
- 78 Control traffic. Includes setting up barricades and directing traffic.
- Assess damage from severe weather or the results of a natural disaster.
- 70 Assistance, other.

Information, Investigation, and Enforcement

- 81 Incident command. Includes providing support to incident command activities.
- Notify other agencies. Includes notifications of utility companies, property owners, and the like.
- Provide information to the public or media.
- 84 Refer to proper authority. Includes turnover of incidents to other authorities or agencies such as the police.
- 85 Enforce fire code and other codes. Includes response to public complaints and abatement of code violations.
- Investigate. Includes investigations done on arrival to determine the situation and post-incident investigations; and collecting incident information for incident reporting purposes.
- 80 Information, investigation, and enforcement, other.

Fill-in, Standby

- 91 Fill in, move up to another fire station.
- 92 Standby.
- 93 Canceled en route.
- 00 Action taken, other.
- 90 Fill-in, standby, other.

Personnel ID ☆, Name, and Rank

Definition

The personnel identification number assigned to each emergency responder and name and rank. The ID number is often the social security number, but it may be any combination of letters and numbers up to nine characters.

Purpose

This information is useful for identifying personnel on specific pieces of apparatus, their level of responsibility, and the actions that they took at the incident.



Entry

Enter the responder's ID number, name, and rank (left-justify).

• Individual fire departments often assign a unique number to each employee in the department.

Example

Firefighter Doug Kane, ID A23–4567 responded to the incident:

Personnel 🛧 ID	Name	Rank or Grade
A ₁ 2 ₁ 3 ₁ 4 ₁ 5 ₁ 6 ₁ 7 _{1 1}	Doug Kane	Firefighter

Attend

Definition

Indicates which personnel were on the apparatus sent to the incident. Fire departments can pre-print or pre-enter the names of personnel in this module. When an incident occurs, the firefighter completing the module can check or mark the Attend box to indicate which personnel on the apparatus actually responded.

Purpose

Fire departments can pre-print or pre-enter personnel in the module.

Entry

Check or mark the Attend box if the person responded to the incident.

Example

Firefighter Doug Kane responded to the incident:



Actions Taken

Definition

The duties performed at the incident scene by the individual responder.

Purpose

This data element documents the range of activities required by the responding emergency personnel to effectively handle the range of emergency situations.

Entry

Enter the two-digit code(s) for up to four actions taken by the individual responder at the scene of the incident. Always report the most significant actions taken before less significant actions taken. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service. Be as specific as possible in stating the actions taken.

Actions Taken codes are listed on page 12–10 of this chapter.

Example

Firefighter Doug Kane assisted with ventilating the roof (51) and overhauling the fire scene (12):

Action	Action	Action	Action
Taken	Taken	Taken	Taken
51	12		

Basic Module (NFIRS-1)

Fire Module (NFIRS-2)

Structure Fire Module (NFIRS-3)

Civilian Fire Casualty Module (NFIRS-4)

Fire Service Casualty Module (NFIRS-5)

> EMS Module (NFIRS-6)

HazMat Module (NFIRS-7)

Wildland Fire Module (NFIRS-8)

Apparatus/
Personnel Modules
(NFIRS-9/-10)

Arson Module (NFIRS-11)

Chapter 13

ARSON
MODULE (NFIRS-11)

State NFIRS Reporting Authority

U.S. Fire Administration
NATIONAL FIRE DATA CENTER

Bureau of Alcohol, Tobacco, & Firearms Arson and Explosives National Repository

A MM DD YYYY Incident Date MM Incident Date MM MM MM MM MM MM MM	Station Incident Number & E	□ Delete NFIRS-11 Arson
B Agency Referred To None Number Prefix Street or Highway	D Availability of № 1 ☐ Transpor	at scene
E Suspected Motivation Factors Check up to three factors 11	42	54 Burglary 61 Homicide concealment 62 Burglary concealment 63 Auto theft concealment 64 Destroy records/evidence 00 Other suspected motivation UU Unknown motivation
Check up to three factors 1	Jug 16 Gasoline or IGNITION/DELAY DEVINE Wick or fuse Candle Cigarette and matchbook Electronic component Mechanical device Remote control FUEL Ordinary combustibles 1 Flammable gas 1 Ignitable liquid 0	sor fuel) 00 Other Container fuel can UU Unknown
Check all that apply 1	wn, village, local or parish a province Laboratory Us	5 Fire department forced entry 6 Entry forced prior to FD arrival 7 Security system activated 8 Security system present (not activated) Sed Check all that apply None ATF 5 Other 6 Private

A MM DD YYYY State Incident Date Station Station	Incident Number 🙀 Exposure	Delete NFIRS-11 Juvenile Firesetter
Complete this section if the person involved in the ignition of the fire was a child or Juvenile under the age of 18. M1 Subject Number Complete a separate Section M form for each juvenile. M3 Gender M3 Gender 1 Male 2 Female	M4 Race Mathematical Mathem	M6 Family Type 1 Single parent 2 Foster parent(s) 3 Two-parent family 4 Extended family N No family unit 0 Other family type U Unknown
Motivation/Risk Factors Check only one of codes 1–3 and then all others (4–9) that apply. Mild curiosity about fire Moderate curiosity about fire Extreme curiosity about fire Diagnosed (or suspected) ADD/ADHD History of trouble outside school History of stealing or shoplifting History of physically assaulting others History of fireplay or firesetting Transiency Other U Unknown	5 Arrested, charged as	rtment uardian hority t/counseling program
N Remarks (local use)		

CHAPTER 13 ARSON MODULE (NFIRS-11)

An indispensable tool in the war against arson is the ability to identify with precision when and where the crime takes place, what form it takes, and the characteristics of its targets and perpetrators. Armed with such information, fire service and law enforcement agencies can develop and implement arson prevention initiatives that will allow them to use their resources in the most efficient and effective manner. The NFIRS 5.0 Arson Module (NFIRS–11) was developed with this goal in mind.

Arson: To unlawfully and intentionally damage, or attempt to damage, any real or personal property by fire or incendiary device.

This optional Arson Module may be used whenever the Cause of Ignition (Fire Module, Block E1) is coded as Intentional or as Cause Under Investigation without any distinction made as to whether a crime has occurred or a determination of criminal intent. The Arson Module may also be used when the fire is coded as Cause Undetermined After Investigation.

The Arson Module may also be used to document juvenile-set fires, whether determined to be intentional, unintentional, or under investigation. This information will permit analysis of juvenile firesetting trends, including intervention strategies and recidivism.

Juvenile-set fires are defined to be those fires where the person involved in the ignition is under the age of 18.

The Arson Module consists of two parts: a local investigation module that permits a fire department or arson investigation unit to document certain details concerning the incident; and a juvenile firesetter section that identifies key items of information that could be used for local, State, and national intervention programs.

Many arson investigation units use an arson information management system to collect and compile information on arson incidents. This module is not intended to replace such systems; instead, it identifies those data elements that could be exported to NFIRS and included as an integral part of the U.S. Fire Administration National Fire Database and the Bureau of Alcohol, Tobacco and Firearms (BATF), Arson and Explosives National Repository.

SECTION A

The guidance and directions for completing Section A of the Arson Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Arson Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

■ Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date A

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🖈

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number \$\frac{1}{2}\$

Entry

Enter the same exposure number found in Section A of the Basic Module.

Delete/Change

Definition

Indicates a change to information submitted on a previous Arson Module or a deletion of all information regarding the incident.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this arson incident and now want to have the data on this report deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your State reporting authority and now want to update or change the information in the State database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION B

Agency Referred To

Definition

Identifies the agency, if any, the incident was referred to for follow-up investigation. This might be a law enforcement agency that has jurisdiction for a criminal investigation or another fire department that may have been requested to conduct the investigation.

Purpose

This element provides the details necessary to contact the agency that conducted any follow-up of the incident. It also allows for the collection, compilation, and analysis of all data associated with a specific incident.

Entry

Enter the referred agency's name, telephone number, address, case number, Originating Agency Identifier (ORI) number, Federal Identifier (FID) code, and FDID (if applicable). Check or mark the None box if the case was not referred to another agency.

ORI: A unique identification number assigned to law enforcement agencies (towns, cities, counties, State police agencies, and some colleges and universities) participating in the FBI's Uniform Crime Reporting (UCR) system or the National Incident-Based Reporting System (NIBRS).

FID: A two-character identification number used by Federal departments to submit crime data to UCR/NIBRS gathered by its dependent bureau/agencies.

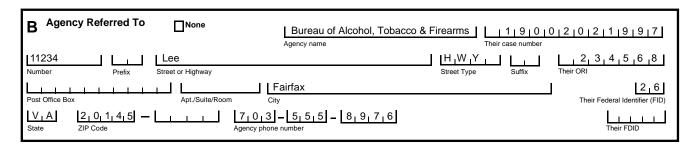
Collectively, the ORI, FID, and Incident numbers provide the necessary uniqueness to avoid duplication of reported incidents.

• "00" is used for State and local agencies as the FID codes. Federal departments such as the FBI use an assigned FID code. This list is not provided in this guide.

Also enter the complete address of the agency the incident was referred to for follow-up investigation. (Street prefixes, types, and suffixes are listed in Chapter 3, pages 13–16.)

Example

The case was referred to the BATF – 703–555–8976, 11234 Lee Highway, Fairfax, VA 20145, Case Number 19002021997, ORI 234568, FID 26:



SECTION C

Case Status

Definition

The current status of the investigation.

Purpose

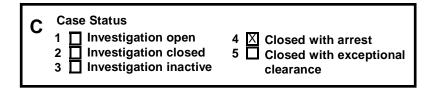
This data element identifies the status of the investigation at the time the report was filed. This information is useful in tracking the closure rate of an investigation as well as providing information to other agencies concerning the status of cases that may be linked to cases they are investigating.

Entry

Check or mark the box that best describes the status of the investigation at this time.

Example

The case is closed with an arrest (4):



CASE STATUS CODES

- 1 Investigation open.
- 2 Investigation closed.
- 3 Investigation inactive.
- 4 Investigation closed with arrest.
- 5 Closed with exceptional clearance.



SECTION D

Availability of Material First Ignited

Definition

Identifies the availability of an ignition source (including matches and lighters) to the subject.

Purpose

Understanding firesetting methods and trends can assist in the development of prevention and intervention strategies.

Entry

Check or mark the box that best describes the availability of the material first ignited.

Example

Matches were brought to the scene (1) by the subject:

ח	Availability of Material First Ignited
	1 X Transported to scene
	2 Available at scene
	U 🔲 Unknown

AVAILABILITY OF MATERIAL FIRST IGNITED CODES

- 1 Transported to scene.
- 2 Available at scene.
- U Unknown.

SECTION E

Suspected Motivation Factors

Definition

Indicates the suspected stimulus that caused the subject(s) to burn any real or personal property.

Purpose

An analysis of arson trends may be based on the possible motivation for the crime.

Entry

Check or mark up to three boxes that best indicate the factors or conditions that constituted possible motivations for the subject.



Example

The suspect burned down the home of his former employer who had fired him (21):

E Suspected Motivation Fa	ctors Check up to t	hree factors	
11 Extortion 12 Labor unrest 13 Insurance fraud 14 Intimidation 15 Void contract/lease 16 Foreclosed property	21 Personal 22 Hate crime 23 Institutional 24 Societal 31 Protest 32 Civil unrest 41 Fireplay/Curiosity	42	54 Burglary 61 Homicide concealment 62 Burglary concealment 63 Auto theft concealment 64 Destroy records/evidence 00 Other suspected motivation UU Unknown motivation

SUSPECTED MOTIVATION FACTORS CODES

- 11 Extortion.
- 12 Labor unrest.
- 13 Insurance fraud.
- 14 Intimidation.
- Void contract/lease.
- 16 Foreclosed property.
- 21 Personal.
- Hate crime.
- 23 Institutional.
- 24 Societal.
- 31 Protest.
- 32 Civil unrest.
- 41 Fireplay/Curiosity.
- 42 Vanity/Recognition.
- 43 Thrills.
- 44 Attention/Sympathy.
- 45 Sexual excitement.
- 51 Homicide.
- 52 Suicide.
- 53 Domestic violence.
- 54 Burglary.
- 61 Homicide concealment.
- Burglary concealment.
- 63 Auto theft concealment.
- 64 Destroy records/evidence.
- 00 Other suspected motivation.
- UU Unknown.

SECTION F



Apparent Group Involvement

Definition

Indicates whether the subject was motivated to commit the arson act because of involvement in a larger group or organization or as a means to promote the cause of a larger group or organization.

Purpose

This information permits analysis of arson trends based on participation in criminal groups or organizations, and it provides possible links to other similar arson cases.

Entry

Check or mark up to three boxes that best indicate the subject's involvement in a larger group or organization. If no group or organization was involved, check or mark the None box.

Example

The suspect committed the crime as initiation into a gang (2):

F	Apparent Group Involvement Check up to three factors
1 2 3 4 5 6 7 8 0 U	☐ Terrorist group ☐ Gang ☐ Anti-government group ☐ Outlaw motorcycle organization ☐ Organized crime ☐ Racial/Ethnic hate group ☐ Religious hate group ☐ Sexual preference hate group ☐ Other criminal group ☐ Unknown

APPARENT GROUP INVOLVEMENT CODES

- 1 Terrorist group.
- 2 Gang.
- 3 Anti-government group.
- 4 Outlaw motorcycle organization.
- 5 Organized crime.
- 6 Racial/Ethnic hate group.
- 7 Religious hate group.
- 8 Sexual preference hate group.
- 0 Other criminal group.
- N None. Acted alone.
- U Unknown.

SECTION G

This section collects data on how entry was gained to the property and what conditions the fire department found on arrival at the scene.

Entry Method

Definition

Indicates how the subject gained access to the property.

Purpose

This data item can be used to track common methods of entry for later analysis and to link other cases.

Entry

Enter the two-digit code and description of the subject's method of entry to the property.

Example

The subject broke the window in the back of the warehouse (14):



ENTRY METHOD CODES

- 11 Door, open or unlocked.
- Door, forced or broken.
- 13 Window, open or unlocked.
- 14 Window, forced or broken.
- 15 Gate, open or unlocked.
- Gate, forced or broken.
- 17 Locks, pried.
- 18 Locks, cut.
- 19 Floor entry.
- 21 Vent.
- 22 Attic/Roof.
- 23 Key.
- Help from inside.
- 25 Wall.
- 26 Crawl space.
- 27 Hid in/on premises.
- 00 Other entry method.
- UU Unknown.

Extent of Fire Involvement on Arrival

Definition

Indicates the fire department's observation of the extent of the fire's involvement when they arrived at the incident scene.

Purpose

Case investigators can use this information to determine if arson is potentially involved in the fire and to measure the speed and the pattern of flame spread.

Entry

Enter the code and description for the extent of fire involvement on arrival at the incident scene.

Example

Flame and smoke were showing when the fire department arrived at the fire (3):



EXTENT OF FIRE INVOLVEMENT ON ARRIVAL CODES

- 1 No flame or smoke showing.
- 2 Smoke only showing.
- 3 Flame and smoke showing.
- 4 Fire through roof.
- 5 Fully involved.

SECTION H

Incendiary Devices

Definition

Identifies the methods, devices, and fuel that were used to burn or attempt to burn any real or personal property.

Purpose

This information is used to track common methods and devices for later analysis and linking of cases.

Entry

Check or mark one box only from each of the three categories as applicable. If no container, device, or fuel source was used, check the appropriate box(es).

Example

The suspect threw a molotov cocktail into the abandoned building (bottle (11) filled with gasoline (14) with a rag for an ignition device (11)):

Example on next page

H Incendiary Devices Select one from each category	CONTAINER	☐ No container
11 🗵 Bottle (glass) 14 12 🔲 Bottle (plastic) 15 13 🔲 Jug 16	☐ Pressurized container☐ Can (not gas or fuel)☐ Gasoline or fuel can	17 Box 00 Other container UU Unknown
11 🗵 Wick or fuse 12 🔲 Candle 13 🔲 Cigarette and matchbot 14 🔲 Electronic component 15 🔲 Mechanical device 16 🔲 Remote control	18 ☐ Che cook 19 ☐ Trail c 20 ☐ Ope c 00 ☐ Othe	□ No device d flare/fuse mical component ler/Streamer en flame source er delay device nown
11 ☐ Ordinary combustible: 12 ☐ Flammable gas 14 ☒ Ignitable liquid 15 ☐ Ignitable solid	17	☐ None stechnic material losive material er material nown

INCENDIARY DEVICES CODES

Container

- 11 Bottle, glass.
- 12 Bottle, plastic.
- 13 Jug.
- 14 Pressurized container.
- 15 Can. Excludes gas and fuel cans (16).
- 16 Gasoline or fuel can.
- 17 Box.
- 00 Other container.
- NN No container.
- UU Unknown.

Ignition/Delay Device

- Wick or fuse.
- 12 Candle.
- 13 Cigarette and matchbook.
- 14 Electronic component.
- 15 Mechanical device.
- 16 Remote control.
- 17 Road flare/fuse.
- 18 Chemical component.
- 19 Trailer/Streamer.
- 20 Open flame source.
- 00 Other delay device.
- NN No device.
- UU Unknown.

Fuel

- 11 Ordinary combustibles.
- 12 Flammable gas.

1

- 14 Ignitable liquid.
- 15 Ignitable solid.
- 16 Pyrotechnic material.
- 17 Explosive material.
- 00 Other material.
- NN None.
- UU Unknown.

SECTION I

Other Investigative Information

Definition

Identifies other investigative information pertinent to the case.

Purpose

Additional information on the case defines the circumstances surrounding the investigation.

Entry

Check or mark all the boxes that apply to the case.

Example

The structure was vacant (3):

I	Other Investigative Information Check all that apply
	Code violations Structure for sale Structure vacant Other crimes involved Illicit drug activity Change in insurance Financial problem Criminal/Civil actions pending

OTHER INVESTIGATIVE INFORMATION CODES

- 1 Code violations.
- 2 Structure for sale.
- 3 Structure vacant.
- 4 Other crimes involved.
- 5 Illicit drug activity.
- 6 Change in insurance.
- 7 Financial problem.
- 8 Criminal/Civil actions pending.

SECTION J

Property Ownership

Definition

Identifies the ownership of the property involved in the arson.

This field identifies the general owner of the property and differs from the specific ownership identified in Block K2 of the Basic Module.

Purpose

The general ownership of the property may provide useful information, such as motive, to case investigators.

Entry

Check or mark the box that best describes the ownership of the property.

Example

The storage company was owned and operated by a private citizen (1):

J	Property Ownership
1 2 3 4 5 6 7	 ☑ Private ☐ City, town, village, local ☐ County or parish ☐ State or province ☐ Federal ☐ Foreign ☐ Military ☐ Other

PROPERTY OWNERSHIP CODES

- 1 Private.
- 2 City, town, village, local.
- 3 County or parish.
- 4 State or province.
- 5 Federal.
- 6 Foreign.
- 7 Military.
- 0 Other.

K L

SECTION K

Initial Observations

Definition

Identifies important initial observations made at the incident scene relating to the property's secure status or circumvention of security systems if present.

Purpose

A description of what the fire department found at the scene may be of use to arson investigators.

Entry

Check or mark all the boxes that apply.

Example

Windows were ajar (1) and the security system activated (7):

K	K Initial Observations Check all that apply	
2 <u> </u>	Windows ajar Doors ajar Doors locked Doors unlocked	5 ☐ Fire department forced entry 6 ☐ Entry forced prior to FD arrival 7 ☒ Security system activated 18 ☐ Security system present (not activated)

INITIAL OBSERVATIONS CODES

- 1 Windows ajar.
- 2 Doors ajar.
- 3 Doors locked.
- 4 Doors unlocked.
- 5 Fire department forced entry.
- 6 Entry forced prior to fire department arrival.
- 7 Security system was activated.
- 8 Security system was present but not activated.

SECTION L

Laboratory Used

Definition

Identifies the laboratory, if any, that analyzed evidence.

Purpose

Provides the means for the collection and analysis of all data associated with a specific incident.

Entry

Case investigators can use this information to locate all the evidence associated with a specific incident.

Example

Local (1) and FBI (4) laboratories were used:



LABORATORY USED CODES

- 1 Local.
- 2 State.
- 3 ATF.
- 4 FBI.
- 5 Other federal laboratory.
- 6 Private.
- N None.

SECTION M

Section M is a submodule of the Arson Module that is completed for each juvenile (under age 18) who was involved in the fire's ignition. If this portion of the module is used, the guidance and directions for completing Section A are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Arson Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

Subject Number

Definition

A unique number is assigned to each juvenile subject involved in the fire's ignition.

A separate submodule (Section M) may be completed for each juvenile involved. The front side of paper forms (Sections A–L) does not need to be completed for the second, third, etc., juveniles.

Purpose

This data element allows tracking of any subject under 18 years of age; it permits analysis and tracking of juvenile firesetter trends.

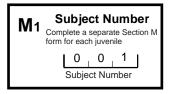
Entry

Enter the subject's number assigned to this juvenile. A separate Subject Number is assigned to each juvenile. The first juvenile is always coded "001," and each succeeding juvenile is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.



Example

This report is for the first subject:



M Age or Date of Birth

Enter either the subject's age or the subject's date of birth. Do not enter both.

Age

Definition

The subject's age in years.

Purpose

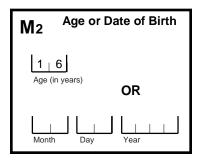
This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends.

Entry

Enter the age of the subject involved in the fire's ignition. Estimate the age if it cannot be determined.

Example

The subject was 16 years old:



Date of Birth

Definition

The month, day, and year of birth of the subject.

Purpose

This data element is an alternative to Age, which can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends.

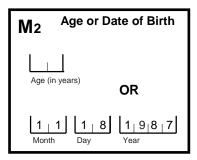
This data element is used as an alternate method for calculating the subject's age. Age is collected in NFIRS but Date of Birth is not.

Entry

Enter the date of birth of the subject showing the month, day, and year (mm/dd/yyyy).

Example

The subject was born on November 18, 1987:



™ Gender

Definition

The identification of the subject as male or female.

Purpose

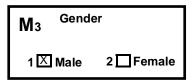
This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences.

Entry

Check or mark the box that indicates the subject's gender.

Example

The subject was male (1):



GENDER CODES

- 1 Male.
- 2 Female.

M

™ Race

Definition

The identification of the race of the subject, based on U.S. Office of Management and Budget (OMB) designations.

Purpose

This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences.

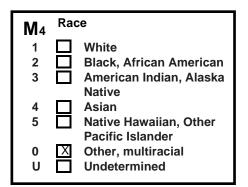
Entry

Check or mark the appropriate box. If race cannot be determined, check or mark the Undetermined box.

Hispanic is not considered a race, because a person can be black and Hispanic, white and Hispanic, etc.

Example

The subject was multiracial (0):



RACE CODES

- 1 White.
- 2 Black or African American.
- 3 American Indian or Alaska Native.
- 4 Asian.
- 5 Native Hawaiian or other Pacific Islander.
- 0 Other. Includes multiracial.
- U Undetermined.

■ Ethnicity

Definition

Identifies the ethnicity of the subject. Ethnicity is an ethnic classification or affiliation. Ethnicity designates a population subgroup having a common cultural heritage, as distinguished by customs, characteristics, language, common history, etc. Currently, Hispanic/Latino is the only OMB designation for ethnicity.

Purpose

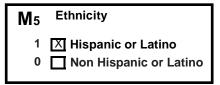
This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs.

Entry

Check or mark the appropriate box.

Example

The subject was an Hispanic (1):



ETHNICITY CODES

- 1 Hispanic or Latino.
- 0 Non Hispanic or Latino.

Family Type

Definition

The nature of the family structure at the time of the incident.

Purpose

Information on family type can assist researchers in determining those risk factors that may be a predictor of juvenile firesetting, delinquency, and adult arson.

Entry

Check or mark the box that best describes the subject's family type.

Example

The subject lived with a foster family (2):

M ₆	Family Type
1	☐ Single parent
2	∑ Foster parent(s)
3	☐ Two-parent family
4	□ Extended family
N	☐ No family unit
0	☐ Other
U	Unknown

FAMILY TYPE CODES

- 1 Single-parent family.
- 2 Foster parent(s).
- 3 Two-parent family.
- 4 Extended family. Includes multigenerational.
- N No family unit.
- 0 Other family type.
- U Unknown.

Motivation/Risk Factors

Definition

The stimulus or risk factors that were present and constituted a possible motivation for the subject(s) to burn, or attempt to burn, any real or personal property.

Purpose

This information is particularly useful in tracking juvenile firesetting trends and in developing prevention and intervention strategies.

Entry

Check or mark only one box for codes 1–3; then check or mark all other boxes (4–9) that apply. If the motivation is not listed or is unknown, check or mark the Other or Unknown box, respectively.

Example

The subject had a history of firesetting:

M 7	Motivation/Risk Factors	Check only one of codes 1–3 and then all others (4–9) that apply
	 1 Mild curiosity abou 2 Moderate curiosity 3 Extreme curiosity a 	about fire
	4 Diagnosed (or susp 5 History of trouble of 6 History of stealing of 7 History of physicall 8 History of fireplay of 9 Transiency 0 Other U Unknown	utside school or shoplifting y assaulting others

MOTIVATION/RISK FACTORS CODES

- 1 Mild curiosity about fire.
- 2 Moderate curiosity about fire.
- 3 Extreme curiosity about fire.
- 4 Diagnosed (or suspected) ADD/ADHD.
- 5 History of trouble outside school.
- 6 History of stealing or shoplifting.
- 7 History of physically assaulting others.
- 8 History of fireplay or firesetting.
- 9 Transiency.
- 0 Other.
- U Unknown.

Disposition of Person Under 18

Definition

Describes how the juvenile firesetter was handled at the end of the incident.

Purpose

The data element tracks the disposition of any subject under 18 years of age. It permits analysis of how juvenile offenders are handled and is particularly useful in tracking juvenile firesetter trends. At the local level, this field is also useful in determining where repeat offenders have been sent in the past.

Entry

Check or mark the box that best describes the disposition of the subject.

Example

The fire department released the subject to social services (3):

Мв	Disposition of Person Under 18							
	1 ☐ Handled within department 2 ☐ Released to parent/guardian 3 ☐ Referred to other authority 4 ☐ Referred to treatment/counseling program 5 ☐ Arrested, charged as adult 6 ☐ Referred to firesetter intervention program 0 ☐ Other U ☐ Unknown							

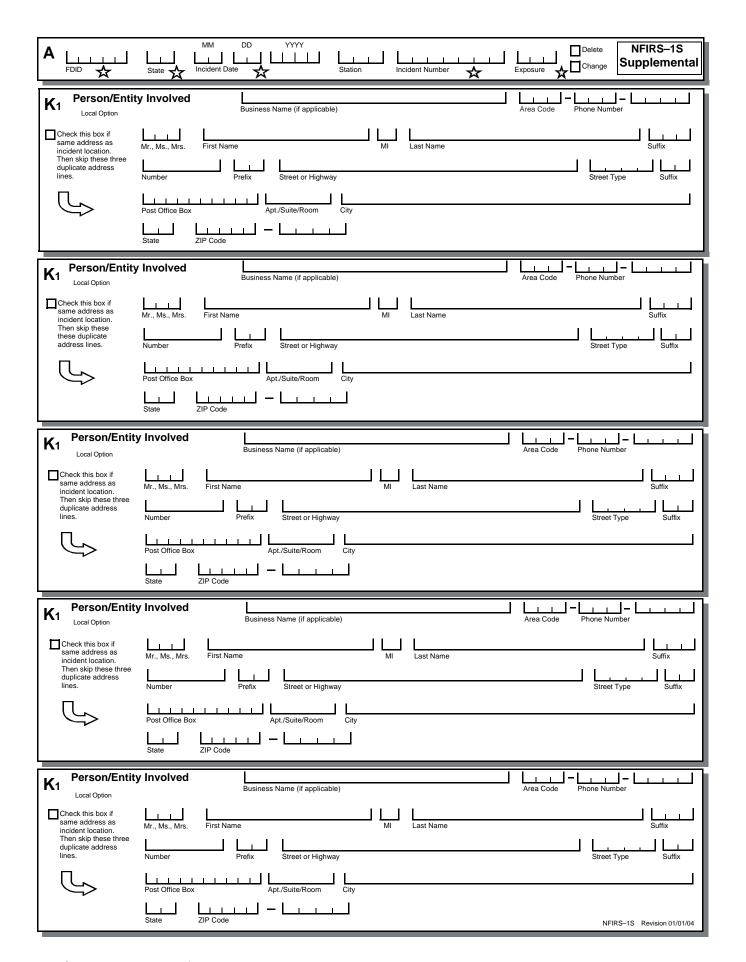
M

DISPOSITION OF PERSON UNDER 18 CODES

- 1 Handled within department (e.g., released with warning).
- 2 Released to parent or guardian.
- Referred to other authority (e.g., social services, prosecuting attorney, juvenile court, probation).
- 4 Referred to treatment/counseling program (e.g., diversion program, in-patient or outpatient treatment program).
- 5 Arrested, charged as adult.
- 6 Referred to firesetter intervention program.
- 0 Other.
- U Unknown.

Chapter 14

SUPPLEMENTAL FORM (NFIRS-1S)



E	3	Supp Local Opt	emental S	Special St	udie	es							NFIRS-1S Supplemental
1		L L L cial ly ID#	Special Study Valu		2	Special Study ID#	Special Study Value	3	Special Study ID#	Special Study Value	4	Special Study ID#	Special Study Value
5	Spec Stud	LLL cial ly ID#	Special Study Valu		6	Special Study ID#	Special Study Value	7	Special Study ID#	Special Study Value	8	Special Study ID#	Special Study Value
Γ.	_	Ber	narks:										
L			cal Option										
												NF	IRS-1S Revision 01/01/04

CHAPTER 14 SUPPLEMENTAL FORM (NFIRS-1S)

The Supplemental Form is a local option for recording additional persons or entities involved in the incident for those departments that use paper-based incident reporting. It adds flexibility to any incident report by expanding the ability to collect additional Basic Module (Block K1) data.

This form also provides (1) fields for recording additional Supplemental Special Studies beyond the one field provided on the Basic Module (Block E3), and (2) additional space for recording Remarks concerning an incident beyond the space available on the Basic Module (Section L).

SECTION A

The guidance and directions for completing Section A of the Supplemental Form are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Supplemental Form must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

Fire Department Identification (FDID) ☆

Entry

Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry

Enter the same State abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry

Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry

Enter the same station number found in Section A of the Basic Module.

Incident Number 🏠

Entry

Enter the same incident number found in Section A of the Basic Module.

Exposure Number \$\frac{1}{2}\$

Entry

Enter the same exposure number found in Section A of the Basic Module.

Delete/Change

Definition

Indicates a change to information submitted on a previous Supplemental Form or a deletion of an incorrect report.

Purpose

To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted a Supplemental Form and now want to have this report deleted from the database. If this box is marked, complete Section K and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted a Supplemental Form to your state reporting authority and now want to update or change the information in the State database. Complete Section K and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your State reporting authority. Forward the report according to your normally established procedures.

SECTION K

Person/Entity Involved

Business Name

Definition

The full name of the company or agency occupying, managing, or leasing the property where the incident occurred.

Purpose

This element provides a basis for long-term analysis in recognizing patterns of repeated fires in the same or different locations over a period of time. The business name is required at the local government level to establish an official document of record.

Entry

Enter the full name of the company or agency occupying the property where the incident occurred. This may or may not be the same as the owner.

Telephone

Definition

The telephone number of the person or entity involved in the incident.

Purpose

This field collects additional information on the person or entity involved, which may be required at a later date.

Entry

Enter the area code and telephone number in the spaces provided.

Person Involved

Definition

The full name of the person involved in the incident. If an entity, enter the name under Business Name at the top of Block K1.

Purpose

This information provides a basis for long-term analysis in recognizing patterns of repeated incidents in the same or different locations over a period of time. The name of the person involved is required at the local government level to establish an official document of record.

Entry

Enter the full name of the person as normally written. Enter the name using the format: prefix, first name, middle initial, last name, and suffix. If the name is unknown, several available resources may be checked for this information, such as street directory publications, utility company records, or other public agencies. Leave blank if unknown. Name prefixes and suffixes are as follows:

	PREFIX		SUFFIX
MR	Mr.	JR	Junior
MRS	Mrs.	SR	Senior
MS	Ms.	1	The First
DR	Doctor	II	The Second
REV	Reverend	III	The Third
		IV	The Fourth
		MD	Medical Doctor
		DDS	Doctor of Dental Science

Address

Definition

The address of the person or entity involved in the incident.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the address where the person or entity involved in the incident can be contacted. The full address includes the street number, prefix, street or highway name, street type, and suffix. (For a more detailed explanation of the address components, see Section B of the Basic Module.)

Post Office Box (P.O. Box)

Definition

The number of a rented compartment in a post office for the storage of mail that is picked up by the business occupant.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the post office box number in the spaces provided. Leave blank if not applicable.

Apartment, Suite, or Room

Definition

The number of the specific apartment, suite, or room where the incident occurred.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the apartment, suite, or room number in the block. Leave blank if not applicable.

City

Definition

The city where the person or entity involved in the incident lives.

K

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry

Enter the city associated with the person's or entity's address.

State

Definition

The State where the person or entity involved in the incident lives.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or State level.

Entry

Enter the abbreviation for the State associated with the person's or entity's address.

► A list of State abbreviations is on page 3–5.

ZIP Code

Definition

A numerical code assigned by the U.S. Postal Service to all jurisdictions within the United States and U.S. Territories.

Purpose

The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or State level.

Entry

Enter the postal ZIP code for the address of the person or entity involved in the incident. Include the Plus Four digits of the ZIP code if known.

• A completed example of the information in this block is shown a on page 3–56.



SECTION E

Supplemental Special Studies

Definition

These fields should be used when you are using the paper forms and need space for more than one special study.

Temporary data elements that can be used for collection of information that is of special interest for a defined period. Special studies are typically required to capture information on emerging trends, problem areas, or a specific issue being studied. When the answer becomes known through the special study, the collection of that field is no longer required. If the data will always be needed for permanent collection, a State- or department-defined permanent user field should be created and used instead of the Special Studies field. A State, a fire department, or the NFDC can define special studies.

Special Study ID Number: This number uniquely identifies each special study that is being run by the fire department, State, or NFDC

Special Study Value: The value in the field being collected. Responses for special studies can be defined as codes or as alphanumeric entries of numeric values or dates. States, fire departments, and the NFDC can define Special Studies fields.

Purpose

The use of special studies allows departments, States, and the NFDC to quickly collect information on an issue or problem and answer a specific question through the temporary use of a special study field over a defined period of time. This is a State or local option.

Entry

If you are participating in a Special Study, your entry will depend on the type of data being collected. Use the codeset defined for the particular Special Study field if it is a coded entry. The data entered may also be a date or a numeric entry if the field has been so defined.

SECTION L

Remarks

This supplemental Remarks block is an additional area for comments concerning the incident if you run out of room on the Basic Module (Section L).

Appendix A

PAPER FORMS FOR NFIRS 5.0 MODULES

A MM DD FDID State MIncident Date	YYYY
	te that the address for this incident is provided on the Wildland Fire Iternative Location Specification." Use only for wildland fires. Street or Highway Street Type Suffix State ZIP Code
Incident Type Aid Given or Received	Check boxes if dates are the same as Alarm Date. ARRIVAL required, unless canceled or did not arrive Controlled Controlled Controlled Last Unit Cleared La
Primary Action Taken (1)	G1 Resources G2 Estimated Dollar Losses and Values Check this box and skip this block if an Apparatus or Personnel Module is used. Apparatus Personnel Suppression
Fire-2	7 Motor oil: from engine or portable container 60 Industrial use pants 8 Paint: from paint cans totaling <55 gallons 63 Military use
Structures 131	Clinic, clinic-type infirmary S39

K1 Person/Entity Involved Local Option Business Name (if applicable) Area Code Phone Number
Check this box if same address as incident location (Section B). Then skip the three duplicate address lines. Number Prefix Street or Highway Street Type Suffix Post Office Box Apt./Suite/Room City
More people involved? Check this box and attach Supplemental Forms (NFIRS-1S) as necessary.
K2 Owner Then check this box and skip the rest of this block. Local Option Local Option Area Code Phone Number
Check this box if same address as incident location (Section B). Then skip the three duplicate address lines. Number Check this box if same address as incident location (Section B). Mr., Ms., Mrs. First Name Mr., Ms., Mrs. First Name Mr., Ms., Mrs. First Name Suffix Street Type Suffix
Post Office Box Apt./Suite/Room City State ZIP Code
Remarks: Local Option
Fire Module Required? Check the box that applies and then complete the Fire Module based on Incident Type, as follows:
Buildings 111 Complete Fire & Structure Modules Special structure 112 Complete Fire Module & Section I, Structure Module Basic Module Only Mobile property 120–123 Complete Fire & Structure Modules Vehicle 130–138 Complete Fire & Structure Modules Vegetation 140–143 Complete Fire or Wildland Module Vegetation 140–143 Complete Fire or Wildland Module Outside rubbish fire 150–155 Basic Module Only Special outside fire 160 Special outside fire 161–164 Complete Fire Module Crop fire 170–173 Complete Fire or Wildland Module
ITEMS WITH A ★ MUST ALWAYS BE COMPLETED!
☐ More remarks? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.
Authorization Check box if same as Officer in Charge ID Signature Position or rank Assignment Month Day Year same as Officer in
Officer In charge. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

A	MM DD FDID State Incident Date	YYYY 	Station Incident Number	Exposure	Delete NFIRS-2 Fire
B B ₁	Property Details		On-Site Materials or Products	None commercial, or materials	there were any significant amounts of industrial, energy, or agricultural products on the property, whether or not they became involved. On-Site Materials Storage Use
	Estimated number of residential living units in building of origin whether or not all units became involved.		On-site material (1)		1 ☐ Bulk storage or warehousing 2 ☐ Processing or manufacturing 3 ☐ Packaged goods for sale 4 ☐ Repair or service U ☐ Undetermined
B ₂	Number of buildings involved	olved	On-site material (2)		1 ☐ Bulk storage or warehousing 2 ☐ Processing or manufacturing 3 ☐ Packaged goods for sale 4 ☐ Repair or service U ☐ Undetermined
Вз	Acres burned (outside fires) None Less than one ac	re	On-site material (3)		Bulk storage or warehousing Processing or manufacturing Packaged goods for sale Repair or service Undetermined
D	Ignition	 	Cause of Ignition	Skip to	E3 Human Factors 🖈
D ₁	Area of fire origin	1 Ir 2 U	ntentional Inintentional	Section G	Check all applicable boxes None 1 Asleep
D ₂	Heat source	4	ailure of equipment or heat act of nature Cause under investigation Cause undetermined after in		2 □Possibly impaired by alcohol or drugs 3 □Unattended person 4 □Possibly mentally disabled
Dз	Item first ignited	_	actors Contributing to Ignit		5 □Physically disabled 6 □Multiple persons involved
D ₄	Type of material first ignited Required only if item first. ignited code is 00 or <70.	L	ontributing to ignition (1)		7 Age was a factor Estimated age of person involved 1 Male 2 Female
F ₁	Equipment Involved in Ignition	F ₂	Equipment Power Source	← Fire Sup	pression Factors None
Г1	None If equipment was not involved, skip to	F2 		G Enter up to	three codes.
L	Section G.	Equipmen	nt Power Source	L. L.	v (4)
Equip	ment Involved	F ₃	Equipment Portability	Fire suppression facto	n (1)
Mode			1 ☐ Portable 2 ☐ Stationary	Fire suppression factor	or (2)
Seria	#	Portab	ole equipment normally can be moved by two persons, is designed to be used in	 	ıl
Year			le locations, and requires no tools to install.	Fire suppression factor	or (3)
H ₁	Mobile Property Involved ☐ None L	1 ₂ M	obile Property Type and Ma	ke Loca	ıl Use
	_	12 	L I	_	Pre-Fire Plan Available e of the information presented in this report may be
1 L 2 E	Not involved in ignition, but burned Involved in ignition, but did not burn	Mobile pro	operty type		d upon reports from other agencies:
3	Involved in ignition and burned	Mobile pro	operty make		☐ Arson report attached ☐ Police report attached ☐ Coroner report attached
Mobi	le property model		Year		☐ Coroner report attached ☐ Other reports attached
Licer	se Plate Number State VIN				
	Structure fire? Please be sure to complete the Structu	re Fire for	m (NFIRS-3).		NFIRS-2 Revision 01/01/05

Structure Type	truction se itinely used r renovation secured unsecured unsecured blished 13 Height Count the roof as phighest story. Total number of above grade.	art of the Later at or To	Main Floor Size
Story of fire origin Jacob Fire Spread Slock D3, Fire Module)	ries w/minor damage e damage) ries w/significant damage ne damage) ries w/heavy damage ne damage) ries w/extreme damage	to Flam Check if no fl same as Mat Fire Module) K1 Ltem cont K2 LType of r	Material Contributing Most e Spread lame spread OR if cerial First Ignited (Block D4, OR if unable to determine. Skip to Section L section L Required only if item contributing code is 00 or <70.
L1	ire only ire with battery in with battery nical e detectors & power es ermined or Operation c small to activate Complete Block L5 Complete Block L6	L5 Required 1	of maintenance, includes leaning ry missing or disconnected ry discharged or dead
M1 Presence of Automatic Extinguishing System N	M3	range. (go to M4) ctive (go to M4) ctivate go to M5)	M5 Reason for Automatic Extinguishing System Failure Required if system failed or not effective. 1 System shut off 2 Not enough agent discharged 3 Agent discharged but did not reach fire 4 Wrong type of system 5 Fire not in area protected 6 System components damaged 7 Lack of maintenance 8 Manual intervention 0 Other U Undetermined

A MM FDID State Incident I	DD YYYY Date Station Incident Number	Delete Civilian Fire Casualty
B Injured Person L First Name	Gender 1 ☐Male MI Last Name	2 ☐Female C Casualty Number Number
	Race White Black, African American Am. Indian, Alaska Native Asian Native Hawaiian, Other Pacific Islander Other, multiracial Undetermined Ethnicity 1	not fire department 1
I Cause of Injury 1 □ Exposed to fire products incluheat, smoke, and gas 2 □ Exposed to toxic fumes other 3 □ Jumped in escape attempt 4 □ Fell, slipped, or tripped 5 □ Caught or trapped 6 □ Structural collapse 7 □ Struck by or contact with obje 8 □ Overexertion or strain 9 □ Multiple causes 0 □ Other U □ Undetermined	than smoke than smoke Check all applicable boxes Asleep Unconscious Describly impaired by alco	er drug Contributing factor (2)
1	M1 Location at Time of Incident	M3 Story at Start of Incident Complete ONLY if injury occurred INSIDE Story at start of incident M4 Story Where Injury Occurred Story where injury occurred, if different from M3 Below grade M5 Specific Location at Time of Injury Complete ONLY if casualty NOT in area of origin Specific location at time of injury
N Primary Apparent Symptom 01	1	P Disposition Transported to emergency care facility Remarks Local option

A L	State A	MM DD YYYY Incident Date	Station Incident Nu	mber 🗙 Exposure	☐ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
B Injure	ed Person	Identification Number MI Last Name	1 ∏Male 2 ∏Fema		C Casualty Number
D Age of	OR	Date of Birth Month Day Year	E Date and Time of Date of Injury Month Day Yea	Time of Injury	Responses Number of prior responses during past 24 hours
1	vention ining ntenance nmunications ninistration investigation	G2 1	nysician (no lost time) st time) ime)	5 🔲 Morgue/ 6 🔲 Residen	s office Funeral home ce or quarters
		7 Death			
Primary a	ry Apparent Symp	otom I1	Cause of Firefighter Cause of injury Factor Contributing Contributing factor	to Injury None	Object Involved None in Injury

K 1	Did protective equipment fail and contribute to the injury? Please complete the remainder of this form ONLY if you answer YES.			Ye No			Equipment Sequence Number	NFIRS-5 Fire Service Casualty
V.	Protective Equipment Item			V .	Pr	otect	tive Equipment Problem	
K ₂	N2		Check one box to indicate the main problem that occurred.				n that occurred.	
Hea	Head or Face Protection Coat, Shirt, or Trousers		11 🔲 Burned					
11 12	☐ Helmet ☐ Full face protector	21 22	☐ Protective coat ☐ Protective trousers	12	П .	Melte	ed	
13 14	☐ Partial face protector☐ Goggles/eye protection		☐ Uniform shirt ☐ Uniform T-shirt	21 Fractured, cracked or broken				۱ ا
15	Hood	25	Uniform trousers	22 Punctured				
16 17	☐ Ear protector ☐ Neck protector	27	☐ Uniform coat or jacket ☐ Coveralls	23	□ :	Scrat	tched	
10	☐ Other	28 20	☐ Apron or gown ☐ Other	24	□ ·	Knoc	ked off	
Воо	ts or Shoes			25		Cut c	or ripped	
31 32	☐ Knee length boots with steel☐ Knee length boots with steel			31	□.	Trapı	ped steam or hazardous	gas
33 34	☐ 3/4 length boots with steel ba☐ 3/4 length boots with steel to	aseplate	and steel toes	32			ficient insulation	
35 36	Boots without steel baseplate Safety shoes with steel base	e and s	teel toes	33		Obje	ct fell in or onto equipm	ent item
37 38	☐ Safety shoes with steel toes of Non-safety shoes		14 Stoci 1005	41		Faile	d under impact	
30	Other			42		Face	piece or hose detached	
Res	piratory Protection			43		Exha	lation valve inoperative	or damaged
41 42	☐ SCBA (demand) open circuit ☐ SCBA (positive pressure) open		uit	44			ess detached or separa	· ·
43	SCBA closed circuit	011 011 01	ait.	<u> </u>				
44 45	Not self-contained☐ Cartridge respirator			45				
46 40	☐ Dust or particle mask ☐ Other			46 ☐ Regulator damaged by contact				
	d Protection			47	□	Prob	lem with admissions va	ive
51	Firefighter gloves with wristl	ets		48		Alarn	n failed to operate	
52	Firefighter gloves without wr			49		Alarn	n damaged by contact	
53 54	☐ Work gloves☐ HazMat gloves			51		Supp	oly cylinder or valve faile	ed to operate
55 50	☐ Medical gloves☐ Other			52	□ :	Supp	oly cylinder/valve damaç	ed by contact
	cial Equipment			53	□ :	Supp	oly cylinder—insufficien	air/oxygen
61	Proximity suit for entry			94	<u></u>	Did n	ot fit properly	
62 63	Proximity suit for non-entry Totally encapsulated, reusab	le cher	mical suit	95		Not p	properly serviced or sto	ed prior to use
64 65	☐ Totally encapsulated, dispos ☐ Partially encapsulated, reusa			96		Not u	used for designed purpo	se
66 67	Partially encapsulated, dispo	sable o	chemical suit	97		Not ι	used as recommended b	y manufacturer
68	Flight or jump suit			00	П	Otho	r equipment problem	
69 71	☐ Brush suit ☐ Exposure suit			UU			etermined	
72								dal and Carial
73 74	☐ Life preserver☐ Life belt or ladder belt			K ₄		:quip lumb	ment Manufacturer, Mo er	dei and Seriai
75	Personal alert safety system	(PASS	Was the failure of more			Ī		
76 77	Radio distress device		than one item of protective equipment a factor in the			М	anufacturer	
77 78	☐ Personal lighting ☐ Fire shelter or tent		injury? If so, complete an additional page of this			L	lodel	
79 70	☐ Vehicle safety belt		form for each piece of			I		<u> </u>
70 00	☐ Special equipment, other☐ Protective equipment, other		failed equipment.			S	erial Number NFIR:	S–5 Revision 05/01/03

A FDID State Incident Date Station	□ Delete □ NFIRS-6 Incident Number ★ Exposure ★ □ Change
Check if same date	Time Arrived at Patient
E1 Age or Date of Birth	G1 Human Factors
	Type injury type for each body site listed under H1 H3 Cause of Illness/Injury Cause of illness/Injury Cause of illness/Injury
Procedures Used Check all applicable boxes No treatment of Airway insertion 14 Intubation (EGTA) 15 Intubation (EGTA) 16 Intubation (ET) 17 Intubation (ET) 18 Intubation (ET) 19 Intuba	Equipment Used or deployed by patient. Check all applicable boxes. Used or deployed by patient. Check all applicable boxes. I Pre-arrival arrest? If pre-arrival arrest? If pre-arrival arrest? If pre-arrival arrest? I Witnessed? I Witnessed? I Bystander CPR? I Post-arrival arrest? I Post-arrival arrest? I make to the pre-arrival arrest arrival arrest? I make to the pre-arrival arrest arrival arrest arrival arrest arrival arrest arrival arrest arrival arre
L1 Initial Level of	M Patient Status 1 ☐ Improved 2 ☐ Remained same 3 ☐ Worsened Check if: 1 ☐ Pulse on transfer 2 ☐ No pulse on transfer 0 ☐ Other No pulse on transfer

A L State	MM DD YYYY Incident Date Station Station Incident Number Exposure Haz No. Change NFIRS-7 HazMat
B HazMat ID LI UN Number	DOT Hazard CAS Registration Number Name
C1 Container None	C2 Estimated Container Capacity □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Complete the remainder of this form only for the first hazardous material involved in this incident. F1 Released From Check all applicable boxes Below grade 1 Inside/on structure Story of release 2 Outside of structure	Composition Density Composition Density
J Cause of Release 1 ☐ Intentional 2 ☐ Unintentional releas 3 ☐ Container/Containn 4 ☐ Act of nature 5 ☐ Cause under invest U ☐ Cause undetermine investigation	Enter up to three contributing factors Enter up to three factors or impediments that affected the mitigation of the incident. Enter up to three factors or impediments that affected the mitigation of the incident. Factor contributing to release (1) Factor contributing to release (2) Factor contributing to release (2) Factor contributing to release (2)
Equipment Involved in Release Equipment involved in release Brand Model Serial # Year	None

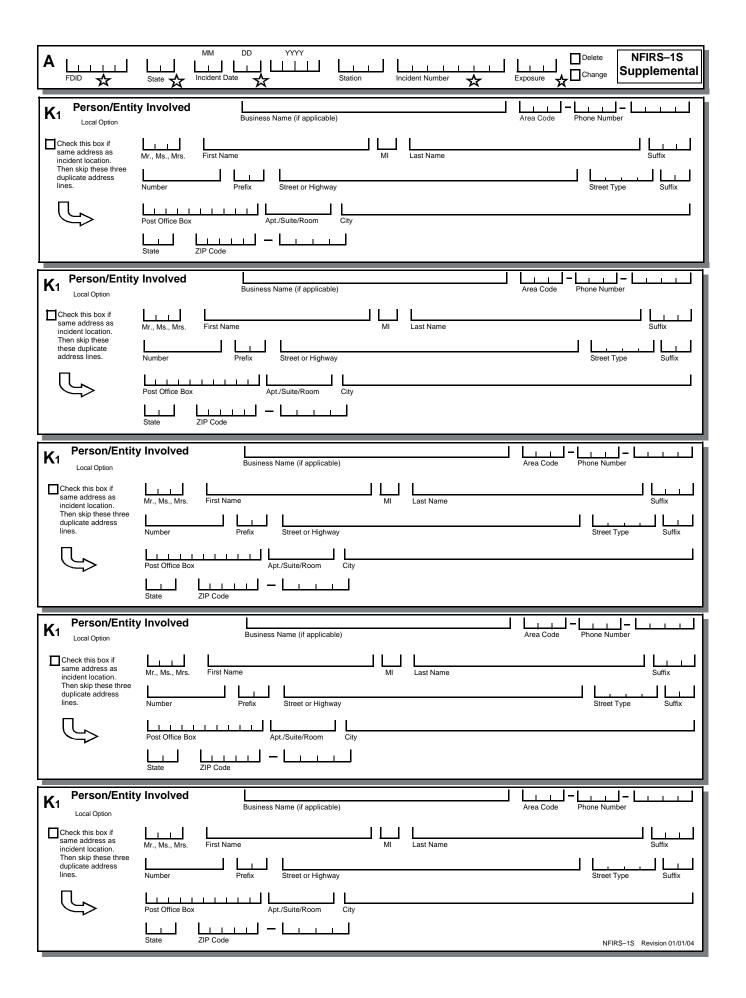
A MM DD FDID State MIncident Date	YYYY Station Incident Number	Delete NFIRS-8 Wildland Fire
Enter Latitude/Longitude OR Township/Range/Section/Subsection Meridian if Section B on the Basic Module is not completed. 1 2 3 4 Latitude OR North South Range Fast Range	Mildland Fire Cause Misuse of fire Equipment 0 Other Smoking U Undetermined Open/Outdoor fire Debris/Vegetation burn Structure (exposure) Incendiary Human Factors Contributing to Ignition ★ Check as many boxes as are applicable. Asleep Possibly impaired by alcohol or drugs Unattended person Possibly mentally disabled Physically disabled Multiple persons involved Age was a factor	Tactors Contributing None None None
Weather Information NFDRS Weather Station ID Weather Type Wind Direction Wind Speed (mph) Air Temperature Check if negative Relative Humidity Fuel Moisture Fire Danger Rating	Number of Buildings Ignited	Primary Crops Burned Identify up to 3 crops if any crops were burned. Crop 1 Crop 2 Crop 3
Property Management Indicate the percent of the total acres burned for each ownership type then check the ONE box to identify the property ownership at the origin of the fire. If the ownership at origin is Federal, enter the Federal Agency Code. Ownership Whosh Total Acres Burned U Undetermined Private Tax paying Non-tax paying Public	Enter the code and the descriptor corresponding to the NFDRS Fuel Model at Origin. L1 Person Responsible for Fire 1 Identified person caused fire 2 Unidentified person caused fire 3 Fire not caused by person If person identified, complete the rest of Section L. L2 Gender of Person Involved 1 Male 2 Female	M Type of Right-of-Way None Required if less than 100 feet. LIFeet Type of right-of-way Type of right-of-way N Fire Behavior These optional descriptors refer to observations made at the point of initial attack. Feet Elevation Relative position on slope
3	Age or Date of Birth Age in Years OR Month Day Year Activity of Person Involved Activity of Person Involved	Aspect L Feet Flame length L Chains per Hour Rate of spread NFIRS-8 Revision 01/01/07

A L L State	MM [DD YYYY	Station Ir	I I	l I I I	Del	A
B Apparatus or Resources Use codes listed below	Dates and	Times Check if same date as All the Basic Module (Block lonth Day Year		Sent X	Number of ★ People	Apparatus Use Check ONE box for each apparatus to indicate its main use at the incident.	Actions Taken List up to 4 actions for each apparatus.
1 ID L Type L T	Dispatch ☐ L Arrival ☐ L Clear ☐ L	 			لبنا	Suppression EMS Other	
2 ID	Dispatch ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				F	Suppression EMS Other	
3 ID L	Dispatch ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				لبنا	Suppression EMS Other	
4 ID L Type L T	Dispatch ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				لبنا	Suppression EMS Other	
5 ID	Dispatch LArrival LClear L		لسال		لبنا	Suppression EMS Other	
6 ID L	Dispatch ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐		H L		لبنا	Suppression EMS Other	
7 ID	Dispatch ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				لبيا	Suppression EMS Other	
8 ID L Type L T	Dispatch L Arrival L Clear L				لبنا	Suppression EMS Other	
9 ID L	Arrival 🔲 🗀		لتتناك		ш	Suppression EMS Other	
Apparatus or Resource	Type				Medical and R	escue	
Ground Fire Suppression 11 Engine 12 Truck or aerial 13 Quint 14 Tanker and pumper coi	mbination	Aircraft 41 Aircraft: fixed-42 Helitanker 43 Helicopter 40 Aircraft, other Marine Equipment	•		71 Rescue un 72 Urban sear 73 High-angle 75 BLS unit 76 ALS unit	it ch and rescue unit	More apparatus? Use additional sheets.
17 ARFF (aircraft rescue a 10 Ground fire suppression Heavy Ground Equipment 21 Dozer or plow 22 Tractor 24 Tanker or tender 20 Heavy ground equipme	on, other	51 Fire boat with p 52 Boat, no pump 50 Marine equipm Support Equipmer 61 Breathing appa 62 Light and air un 60 Support appara	ent, other nt aratus support nit		Other 91 Mobile com 92 Chief office 93 HazMat uni 94 Type I hand 95 Type II hand 99 Privately o	er car t d crew d crew	NN None JU Undetermined NFIRS-9 Revision 01/01/04

A State	MM DD YYYY Incident Date	Station In	I I I cident Number	<u> </u>	Exposure		NFIRS-10 Personnel
B Apparatus or Resources	Dates and Times Check if same date as Ala the Basic Module (Block E Month Day Year		Sent X	of ☆	Apparatus Use Check ONE box for eac apparatus to indicate it use at the incident.	ch List up to	ns Taken o 4 actions for paratus and sonnel.
A	ispatch		Sent		Suppressi EMS Other	on	
Personnel 🛧 ID	Name	Rank or Grade	Attend x	Action Taken	Action Taken	Action Taken	Action Taken
A	ispatch		Sent	لبنا	Suppressi EMS Other	on	
Personnel 🕁	Name	Rank or Grade	Attend	Action Taken	Action Taken	Action Taken	Action Taken
Ar			Sent	لبنا	Suppressi EMS Other	on	
Personnel 🛧 ID	Name	Rank or Grade	Attend	Action Taken	Action Taken	Action Taken	Action Taken

A MM DD YYYY FDID State Incident Date Station Inc	Delete NFIRS-11 Arson Exposure Change
11 ☐ Extortion 22 ☐ Hate crime 43 ☐ 12 ☐ Labor unrest 23 ☐ Institutional 44 ☐ 13 ☐ Insurance fraud 24 ☐ Societal 45 ☐ 14 ☐ Intimidation 31 ☐ Protest 51 ☐ 15 ☐ Void contract/lease 32 ☐ Civil unrest 52 ☐	Their case number Their case number
F Apparent Group Involvement Check up to three factors 1	14
Other Investigative Information Check all that apply	Initial Observations Check all that apply

MM DD YYYY FDID State State Incident Date Station Station	Delete NFIRS-11 Juvenile Exposure Change Firesetter
Complete this section if the person involved in the ignition of the fire was a child or Juvenile under the age of 18. M1 Subject Number Complete a separate Section M form for each juvenile. Subject Number M3 Gender 1 Male 2 Female	M4 Race M6 M6 M6
Motivation/Risk Factors Check only one of codes 1-3 and then all others (4-9) that apply. 1 Mild curiosity about fire 2 Moderate curiosity about fire 3 Extreme curiosity about fire 4 Diagnosed (or suspected) ADD/ADHD 5 History of trouble outside school 6 History of stealing or shoplifting 7 History of physically assaulting others 8 History of fireplay or firesetting 9 Transiency 0 Other U Unknown	M8 Disposition of Person Under 18 Handled within department Released to parent/guardian Referred to other authority Referred to treatment/counseling program Arrested, charged as adult Referred to firesetter intervention program Oldher Ulnknown
N Remarks (local use)	



E	3	Supp Local Op	ementa on	l Speci	ial Studi	es							NFIRS-1S Supplemental
1	Spe Stud	dy ID#	Special Study V	/alue	2	Special Study ID#	Special Study Value	3	Special Study ID#	Special Study Value	4	Special Study ID#	Special Study Value
5	Spe Stud	LLL cial dy ID#	Special Study V	/alue	6	Special Study ID#	Special Study Value	7	Special Study ID#	Special Study Value	8	Special Study ID#	Special Study Value
L]	_	marks:										
												NF	IRS-1S Revision 01/01/04

Appendix B

ALPHABETIZED SYNONYMS OF SELECTED CODE LISTS

Appendix B

Alphabetized Synonyms of Selected Code Lists

This appendix presents synonyms of several code lists presented in the chapters to this guide. These alphabetical lists are based on the logic and definitions of their respective code lists. They are designed to assist a user in selecting proper classifications. A person using this list, however, should compare the classification found here with those in the chapter to ensure that there are no qualifications on the definition of a term.

The six synonym lists of this appendix apply to eleven code lists in the chapters, as follows:

Property Use - Page B-3:

Chapter 3, Basic Module, Section J, Property Use

Materials/Products - Page B-9:

Chapter 4, Fire Module, Section C, On-Site Materials or Products

Area/Location - Page B-14:

Chapter 4, Fire Module, Block D,: Area of Fire Origin

Chapter 6, Civilian Fire Casualty Module, Block M5, Specific Location at Time of Injury

Items Ignited – Page B-18:

Chapter 4, Fire Module, Block D3: Item First Ignited

Chapter 5, Structure Fire Module, Block K1: Item Contributing Most to Flame Spread

Type of Material – Page B–22:

Chapter 4, Fire Module, Block D4: Type of Material First Ignited

Chapter 5, Structure Fire Module, Block K2, Type of Material Contributing Most to Flame Spread

Equipment Involved - Page B-25:

Chapter 4, Fire Module, Block F1, Equipment Involved in Ignition

Chapter 9, HazMat Module, Section M, Equipment Involved in Release

Chapter 10, Wildland Fire Module, Section G, Equipment Involved in Ignition

Property Use Codes

	Α	557	Beauty shop
599	Administrative office	700	Beverage manufacturing
241	Adult art school	112	Billiard center
241	Adult dance school	700	Bindery, book
241	Adult education center	144	Bingo parlor (gambling)
655	Agriculture: farm, crops, orchard (incl. processing	700	Blacksmith shop
033	and packaging on property)	439	Boarding house
974	Aircraft loading area	898	Boat launching facility
972	Aircraft runway	571	Boat refueling facility
973	Aircraft taxiway	579	Boat sales, service, repair
171	Airport terminal	143	Boating club
322	Alcohol abuse recovery center	700	Book bindery
549	Ammunition sales	549	Book store
123	Amphitheater	111	Bowling alley
113	Amusement center, electronic	141	Boys' club
129	Amusement center, indoor or outdoor	921	Bridge
300	Animal hospital	931	Brushland
819	Animal nospital Animal pen, shelter	464	Bunk house
539	Antique shop	173	Bus station
429	Apartment	599	Business office
700	Appliance manufacturing		
539	Appliance store		
152	Aquarium		C
113	Arcade, video	116	Cabana
123	Arena	161	Cafe, cafeteria
123	Armory, with fixed seating	935	Campsite with utilities
122	Armory, without fixed seating	519	Candy store
152	Art gallery	579	Car sales, service, repair
241	Art school, adult	129	Carnival
569	Art supplies	144	Casino
323	Asylum	581	Catalog store
141	Athletic club	131	Cathedral
592	ATM kiosk	938	Cemetery
599	Attorney's office	322	Center, alcohol/drug/substance abuse
182	Auditorium	131	Chapel
579	Automobile sales, service, repair	700	Chemical manufacturing
	· · · · · · · · · · · · · · · · · · ·	254	Child care, in commercial property
	_	255	Child care, in residence, licensed
	В	256	Child care, in residence, unlicensed
519	Bakery sales	569	Chimney cleaning service
123	Ballpark	549	China shop
121	Ballroom	340	Chiropractor office
592	Bank	131	Church
162	Bar	129	Circus
557	Barber shop	241	Classroom, college
819	Barn	341	Clinic
464	Barracks	529	Clothing store
110	Baseball batting range	141	Club: athletic, health
121	Basketball court	142	Club: country, golf, equestrian, tennis, hunting,
116	Bathhouse		fishing
937	Beach	144	Club, gambling
142	Beach club	143	Club, yacht

142	Clubhouse	564	Dry cleaning shop
679	Coal mine	529	Dry goods shop
926	Collection box, charity	919	Dump
241	College building, classroom	419	Duplex
464	College dormitory	419	Dwelling, one- and two-family
963	Commercial street, road		<i>G</i> , , , , , , , , , , , , , , , , , , ,
639	Communications center		_
635	Computer center, laboratory		E
182	Concert hall	241	Education center, adult
429	Condo	659	Egg production
981	Construction site (not buildings)	642	Electrical distribution system
311	Convalescent home	700	Electrical equipment manufacturing
511	Convenience store	642	Electrical substation
464	Convent dormitory	615	Electric-generating plant
122	Convention center, without fixed seating	113	Electronic amusement center
142	Country club	213	Elementary school (incl. kindergarten)
155	Courthouse, courtroom	921	Elevated roadway, railway
946	Creek	816	Elevator, grain
134	Crematorium	341	Emergency medical facility
323	Criminally insane facility	142	Equestrian club, lodge
655	Crops	122	Exhibit hall, without fixed seating
033	Crops	800	Explosives storage
		569	Exterminating service
	D	549	Eyeglass store
519	Dairy store		, 3
121	Dance hall		_
241	Dance school, adult		F
254	Day care, in commercial property	700	Factory
255	Day care, in residence, licensed	129	Fair (carnival)
256	Day care, in residence, unlicensed	655	Farm
631	Defense installation	122	Field house, without fixed seating
519	Delicatessen	931	Field, open
342	Dentist's office	123	Field, sports
581	Department store	982	Field: gas, oil
419	Detached home	186	Film production studio
361	Detention camp, adult	888	Fire station
363	Detention home, juvenile	559	Fireworks sales
161	Diner	659	Fish hatchery
161	Dining hall	142	Fishing lodge
162	Dinner theater	645	Flammable liquid distribution
960	Dirt Road	569	Floor cleaning service
321	Disability development facility	549	Florist shop
162	Disco club	519	Food and beverage sales
581	Discount store	700	Food industry processing
961	Divided highway	700	Footwear manufacturing
898	Dock	669	Forest
342	Doctor's office	462	Fraternity house
464	Dormitory	134	Funeral parlor
183	Drive-in theater	700	Furniture manufacturing
962	Drive-in incater Driveway, residential	539	Furniture store
322	Drug abuse recovery center		
581	Drug store		
201	2148 31010		

	e e		
144	G Cambling alub	114	Ice sketing wink indeed on outdoor
144	Gambling club	114	Ice skating rink, indoor or outdoor Incinerator
882	Garage, commercial parking, general vehicle Garage, parking (detached from residence)	648	
881	0 1 0 1	984 700	Industrial plant yard area (not outdoor storage)
648	Garbage disposal (not landfill) Garden supply store	700	Industry
559	~ ~ ,	331 341	Infirmary, hospital-type
644 982	Gas distribution system Gas field	341 449	Infirmary, clinic-type Inn
	Gas station	599	Inn Insurance carrier's office
571	Golf club	399	msurance carrier's office
142 938	Golf course, public or private		
110	Golf driving range		J
599	Government office (not defense)	361	Jail, not part of police station or other facility
816	Grain elevator	549	Jewelry store
123	Grandstand	215	Junior high school
931	Grassland	363	Juvenile detention center
679	Gravel pit		,
655	Greenhouse		
519	Grocery store		K
121	Gymnasium	162	Karaoke bar
1 2 1	Gymnasium	819	Kennel
		162	Key club
	Н	213	Kindergarten
557	Hair salon		
459	Halfway house		1
880	Hangar: airplane, boat	F00	L
539	Hardware store	599	Labor organization office
659	Hatchery, fish	635	Laboratory, computer
141	Health club	629	Laboratory, science
614	Heat-generating plant	946	Lake
974	Helipad, helistop	938	Land plot, graded or cared-for
171	Heliport	931	Land, open
343	Hemodialysis unit (not part of hospital)	919	Landfill, sanitary Launching facility for boats
215	High school	898 564	e ,
961	Highway: divided, limited access	599	Laundry
559	Hobby shop	151	Lawyer's office Library
123	Hockey rink (in arena)	569	Library Linen supply house
419	Home: detached, manufactured, mobile	519	Liquor store
569	Home maintenance service	659	Livestock production
439	Homeless shelter	819	Livestock storage
332	Hospice	974	Loading area, aircraft
331	Hospital: medical, pediatric, psychiatric	839	Locker, storage
449	Hostel	449	Lodge
449	Hotel, commercial	141	Lodge: athletic, health
439	Hotel, residential	142	Lodge: fishing, hunting
439	House: boarding, rooming	439	Lodging house
462	House: fraternity, sorority	311	Long-term care facility, medical
539	Household goods, repairs, sales	459	Long-term care facility, medical (not nursing
142	Hunting lodge	137	home)
		936	Lot, vacant
		571	LP-gas bottle filling station, public
			o , r

		-	
849	LP-gas storage	679	Natural gas well
559	Lumber sales	700	Newspaper publishing
		549	Newspaper stand, shop
	M	162	Nightclub
02.6		615	Nuclear powerplant
926	Mailbox	211	Nursery school
596	Mailing firm	464	Nurses' quarters
581	Mall, common areas	311	Nursing home
419	Manufactured home		
700	Manufacturing		0
898	Marina	2.11	0
898	Marine passenger terminal	941	Ocean
571	Marine refueling facility	599	Office, business (incl. administrative, attorney's,
579	Marine sales, service, repair		insurance carrier, labor organization, real estate, trade
519	Market		association)
511	Market, convenience	342	Office: dentist, doctor, oral surgeon
952	Marshalling yard	629	Office incidental to laboratory facility
174	Mass transit station	300	Office, veterinary, research (not a laboratory)
134	Mausoleum	982	Oil field
931	Meadow	679	Oil well
331	Medical hospital	419	One-family dwelling
154	Memorial structure	181	Opera house
323	Mental institution	549	Optical goods sales
321	Mental retardation facility	342	Oral surgeon's office
700	Metal manufacturing	655	Orchard
174	Metro	926	Outbuilding (not garage or shed)
215	Middle school	808	Outbuilding, storage
464	Military barracks	124	Outdoor area with recreational equipment
631	Military installation	926	Outhouse
659	Milking facility	341	Outpatient clinic
679	Mine	807	Outside material storage area
899	Mini-storage unit	849	Outside storage tank
110	Miniature golf course	921	Overpass
131	Mission		-
419	Mobile home		_
464	Monastery dormitory		Р
154	Monument	539	Paint store
134	Morgue	700	Papermill
134	Mortuary	938	Park
131	Mosque	935	Park, camping trailer/recreational vehicle, with
449	Motel, commercial		utilities
579	Motor vehicle sales, service, repair	965	Parking area, uncovered
186	Movie production studio	881	Parking garage, detached from residence
183	Movie theater	882	Parking garage, commercial, general vehicle
181	Movie theater with stage	171	Passenger terminal, airport
429	Multifamily dwelling	173	Passenger terminal, bus
152	Museum	898	Passenger terminal, marine
539	Music store	174	Passenger terminal: rail, rapid transit, subway
==:		931	Pasture
		549	Pawn shop
	N	331	Pediatric hospital
557	Nail salon	361	Penitentiary
			•

557	Personal service	679	Raw materials mine, quarry
559	Pet store	599	Real estate office
700	Petroleum refinery	110	Recreation site, fixed-use
700	Pharmaceutical manufacturing	559	Recreational store
549	Pharmacy	919	Recycling collection point
559	Photographic equipment store	363	Reformatory
898	Pier	839	Refrigerated storage
983	Pipeline (not gas, flammable liquid, or water)	539	Repair shop, household goods
645	Pipeline, flammable liquid	593	Research office (not a laboratory)
644	Pipeline, gas	459	Residential board and care
647	Pipeline, water	881	Residential garage, detached from residence
152	Planetarium	439	Residential hotel
984	Plant yard, industrial (not outdoor storage)	899	Residential storage unit
615	Plant, electric-generating	962	Residential street, road, driveway
614	Plant, heat-/steam-generating	938	Residential yard
700	Plastic manufacturing	161	Restaurant (incl. carryout, drive-through, fast food)
124	Playground	983	Right-of-way: power line, other utility
926	Playhouse, children's	951	Right-of-way, railroad
365	Police station	123	Rink: ice, hockey, and roller skating (in arena)
946	Pond	114	Rink, ice skating, indoor or outdoor
112	Pool hall	115	Rink, roller skating, indoor or outdoor
116	Pool, swimming: indoor or outdoor	946	River
941	Port (not piers or wharves)	937	Riverfront area (not piers or docks)
596	Post office	963	Road, commercial
659	Poultry production	962	Road, residential
819	Poultry storage	115	Roller skating rink, indoor or outdoor
819	Pound	439	Rooming house
983	Power line right-of-way	429	Row house
211	Preschool	648	Rubbish burner, industrial
700	Printing facilities	121	Running track, indoor
361	Prison, adult	972	Runway, aircraft
926	Privy	7,2	rain wy, arrefure
186	Production studio, film or movie		
569	Professional supplies or services		S
926	Protective shelter	557	Salon: nail, tanning, hair
331	Psychiatric hospital	162	Saloon
162	Pub	679	Salt mine
700	Publishing	919	Sanitary landfill
110	Putt-putt miniature golf	648	Sanitation utility
	1 0	700	Sawmill
	_	241	School: art, dancing
	Q	213	School, elementary (including kindergarten)
679	Quarry	215	School: high, middle, junior
		241	School, vocational
	D	629	Science laboratory
	R	941	Sea
123	Race track	564	Self-service laundromat
639	Radio facility	571	Service station
185	Radio studio	648	Sewage disposal
951	Railroad right-of-way	808	Shed
952	Railroad yard	439	Shelter, homeless
174	Rapid transit station	926	Shelter, protective

F20	Characteria	1.62	Common alask
529	Shoe store	162	Supper club
557	Shop: barber, beauty	116	Swimming pool, indoor or outdoor
549	Shop, specialty	952	Switchyard
816	Silo	131	Synagogue
419	Single-family dwelling		
115	Skateboard park		Т
114	Skating rink, ice	0.40	-
115	Skating rink, roller	849	Tank storage, gas
700	Slaughterhouse	557	Tanning salon
161	Snack bar	162	Tavern
141	Social club	973	Taxiway, aircraft
462	Sorority house	926	Telephone booth
549	Specialty shop	639	Television facility
123	Sports arena, field, stadium	185	Television studio
559	Sporting goods store	131	Temple
819	Stable	429	Tenement
123	Stadium	142	Tennis club
174	Station, transit	171	Terminal, airport
549	Stationery shop	173	Terminal, bus
154	Statue	898	Terminal, marine
614	Steam-generating plant	174	Terminal: rail, rapid transit, subway
819	Stockyard	700	Textile processing, manufacturing
882	Storage, commercial vehicle	529	Textile, wearing apparel sales
800	Storage, explosives	162	Theater, dinner
819	Storage, livestock	183	Theater, drive-in
807	Storage, outside material	181	Theater, live performance
	•	183	Theater, movie
849	Storage, outside tank	669	Timberland
880	Storage, vehicle (incl. aircraft, boat; not parking	579	Tire store
001	garage)	700	Tobacco processing
891	Storage, warehouse (not refrigerated storage)	549	Tobacco sales
839	Storage: locker, refrigerated	926	Toll booth
899	Storage unit: self-, mini-	808	Tool shed
539	Store: antique, appliance, furniture, hardware, music,		Townhouse
	paint, wallpaper, video	429	
519	Store: bakery, candy, dairy, grocery, liquor	559	Toy store
529	Store: clothing, shoe, wearing apparel	121	Track, running, indoor
511	Store, convenience	599	Trade association office
581	Store: department, discount, catalog, drug	926	Tramway, aerial
559	Store, recreational (incl. hobby, toy, pet, sporting	642	Transformer, electrical
	goods, photographic supply, garden supply, lumber	921	Trestle
	supply, fireworks)	922	Tunnel
549	Store, specialty (incl. ammunition, book, china,	419	Two-family dwelling
	florist, jewelry, optical, pharmacy, stationery, newspaper,		
	tobacco)		U
946	Stream		
963	Street, commercial	922	Underground passage
962	Street, residential	926	Underground shelter
186	Studio, film or movie production	241	University building, classroom
185	Studio, radio and television	642	Utility pole
322	Substance abuse recovery center	983	Utility right-of-way
174	Subway station		
519	Supermarket		
•	1		

	porty eso obdos (oblica)		
	V	137	Agriculture, pesticides
936	Vacant lot	136	Agriculture, pets
700	Vehicle assembly, manufacturing	131	Agriculture: trees, plants, flowers
571	Vehicle fueling station	831	Aircraft: airplanes
965	Vehicle parking area, uncovered	832	Aircraft: helicopters
882	Vehicle parking, commercial, general vehicle	831	Airplanes
880	Vehicle storage: aircraft, boat (not parking garage)	121	Alcoholic beverages
593	Veterinary office	811	All terrain vehicles (ATVs)
113	Video arcade	642	Aluminum products
539	Video store	932	Ammunition
241	Vocational school	118	Animal fat
		332	Animal skins, fur
		331	Animal skins, leather
	W	712	Answering machines
549	Wallpaper store	921	Antiques
891	Warehouse	711	Appliances, electronics: appliances
647	Water utility (incl. collection, distribution, storage,	713	Appliances, electronics: electronic media
	and treatment)	712	Appliances, electronics: electronic supplies
700	Wearing apparel manufacturing	714	Appliances, electronics: photographic supplies
529	Wearing apparel store	943	Art supplies
898	Wharf	943	Artwork
669	Wildland preserve	516	Asphalt
569	Window washing service	813	Automobile parts (not tires)
669	Woodland	811	Automobiles
	Υ		В
143	Yacht club	233	Backpacks
938	Yard, residential	111	Baked goods
449	YMCA, YWCA, with sleeping facilities	911	Barrels
141	YMCA, YWCA, without sleeping facilities	225	Beauty supply
111	Twich, I well, without steeping facilities	213	Bedding
		242	Beds
	Z	112	Beef, meat products
938	Zoo		
		121	Beer
		121 233	Beer Belts
0	Cita Matariala ar Draduata	233	Belts
On-	Site Materials <i>or</i> Products	233 121	Belts Beverages, alcoholic
		233 121 122	Belts Beverages, alcoholic Beverages, nonalcoholic
On-		233 121 122 851	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum)
	des	233 121 122 851 811	Belts Beverages, alcoholic Beverages, nonalcoholic
Cod	des A	233 121 122 851 811 821	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats
Coc	A Abrasives	233 121 122 851 811 821 412	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini
Cod	A Abrasives Accessories: backpacks, belts, briefcases, purses,	233 121 122 851 811 821 412 911	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles
628 233	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets	233 121 122 851 811 821 412	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles Boxes
628 233 231	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets Accessories: jewelry, watches	233 121 122 851 811 821 412 911	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles
628 233 231 232	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets Accessories: jewelry, watches Accessories: luggage, suitcases	233 121 122 851 811 821 412 911 911 622	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles Boxes Building supplies
628 233 231 232 517	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets Accessories: jewelry, watches Accessories: luggage, suitcases Adhesives	233 121 122 851 811 821 412 911 911 622 233	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles Boxes Building supplies Briefcases
628 233 231 232 517 134	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets Accessories: jewelry, watches Accessories: luggage, suitcases Adhesives Agriculture, crops (not grain)	233 121 122 851 811 821 412 911 911 622 233 811	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles Boxes Building supplies Briefcases Buses
628 233 231 232 517 134 132	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets Accessories: jewelry, watches Accessories: luggage, suitcases Adhesives Agriculture, crops (not grain) Agriculture: feed, grain, seed	233 121 122 851 811 821 412 911 911 622 233 811 522	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles Boxes Building supplies Briefcases Buses Butane
628 233 231 232 517 134 132 138	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets Accessories: jewelry, watches Accessories: luggage, suitcases Adhesives Agriculture, crops (not grain) Agriculture: feed, grain, seed Agriculture, fertilizer	233 121 122 851 811 821 412 911 911 622 233 811 522	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles Boxes Building supplies Briefcases Buses Butane
628 233 231 232 517 134 132	A Abrasives Accessories: backpacks, belts, briefcases, purses, satchels, wallets Accessories: jewelry, watches Accessories: luggage, suitcases Adhesives Agriculture, crops (not grain) Agriculture: feed, grain, seed	233 121 122 851 811 821 412 911 911 622 233 811 522	Belts Beverages, alcoholic Beverages, nonalcoholic Bicycles (incl. tandum) Bikes, mini Boats Books Bottles Boxes Building supplies Briefcases Buses Butane

	C	912	Containers, packing materials: packing material
714	Cameras	913	Containers, packing materials: pallets
811	Camper trailers	118	Cooking grease
945	Camping products	416	Copier paper
821	Canoes	421	Cordage
415	Cardboard	313	Cork
413	Cards, greeting	225	Cosmetics
613	Carpentry tools	321	Cotton
631	Carpets	942	Crafts
811	Carts, golf	134	Crops (not grain)
713	Cassette tapes	211	Curtains
136	Cats		
622	Cement mix		
633	Ceramic tile		D
245	Ceramics	113	Dairy products
117	Cereals, packaged	116	Delicatessen products: meat, poultry, fish
531	Charcoal	721	Dental supplies
113	Cheese	511	Diesel fuel
543	Chemicals, drugs: cleaning supplies	952	Dinnerware, restaurant supplies
541	Chemicals, drugs: hazardous chemicals	961	Discarded material, junkyard materials
545	Chemicals, drugs: illegal drugs	962	Discarded material, recyclables
542	Chemicals, drugs: nonhazardous chemicals	963	Discarded material, trash (not recyclable)
544	Chemicals, drugs: pharmaceuticals	711	Dishwashers
245	China	713	Disks, computer
952	China, restaurant supplies	136	Dogs
712	Circuit boards	211	Drapes
543	Cleaning supplies	545	Drugs, illegal
243	Clocks	544	Drugs, legal
214	Cloth		
221	Clothes, wearable products		E
532	Coal	245	Earthenware
534	Coke	713	Electronic media
922	Collectibles	713	Electronic supplies
225	Cologne	933	Explosives
513	Combustible liquid, including heating oil	223	Eyeglasses
643	Combustible metal products (magnesium, titanium)	223	Eyegiasses
712	Communications equipment		
713	Compact disks (CD-ROMs)		F
712	Computers	213	Fabrics, bedding
622	Construction and home improvement products	214	Fabrics: cloth, yarn, dry goods
628	Construction supplies, abrasives	211	Fabrics: curtains, drapes
622	Construction supplies, construction and home	212	Fabrics, linens
	improvement	811	Farm vehicles
626	Construction supplies, electrical parts	118	Fat, cooking
629	Construction supplies, fencing	132	Feed
621	Construction supplies, hardware products	629	Fencing, fence supplies
627	Construction supplies, insulation	138	Fertilizer
625	Construction supplies: lighting fixtures, lamps	344	Fiberglass
623	Construction supplies: pipes, fittings	321	Fibers, cotton
624	Construction supplies, stone-working materials	323	Fibers, silk
812	Construction vehicles	322	Fibers, wool
911	Containers, packing materials: bottles, barrels, boxes	714	Film, photographic

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934	Fireworks	511	Gasoline
116	Fish, deli products	245	Glass
112	Fish, meat products	223	Glasses, optical
623	Fittings	811	Go-karts
831	Fixed-wing aircraft	811	Golf carts
523	Flammable gases, hydrogen	923	Goods, flea market
522	Flammable gases: LP gas, butane, propane	132	Grain
521	Flammable gases, natural gas	117	Grain, packaged
512	Flammable liquid (not gasoline)	515	Grease-based material (noncooking)
517	Flammables, combustible liquids: adhesive, resin, tar	118	Grease, cooking
516	Flammables, combustible liquids: asphalt	413	Greeting cards
511	Flammables, combustible liquids: diesel fuel, gasoline	628	Grinding material
512	Flammables, combustible liquids: flammable liquids	931	Gun
Г1Г	(not gasoline)		
515	Flammables, combustible liquids: grease (noncook-		Н
Г12	ing), heavy oils	613	Hand tools
513	Flammables, combustible liquids: heating oil	621	Hardware products
514	Flammables, combustible liquids: motor oil	133	Hay
923	Flea market goods	541	Hazardous chemicals
631	Floor and wall coverings: carpets, rugs	513	Heating oil
633	Floor and wall coverings, ceramic tile	515	Heavy oil
632	Floor and wall coverings: linoleum, tile	832	Helicopters
635	Floor and wall coverings, paint	945	Hiking products
634	Floor and wall coverings, wallpaper	942	Hobby materials, supplies
131	Flowers	622	Home improvement products
111	Food, baked goods	136	Household pets
113	Food, dairy products	244	Housewares
116	Food, deli products	523	Hydrogen gas
118	Food, fat/cooking grease	323	rrydrogen gas
112	Food: fish, meat, poultry products		
117	Food: packaged cereals, grains		I
114	Food: produce: fruit, vegetables	545	Illegal drugs
115	Food: sugar, spices	612	Industrial machine parts
222	Footwear	611	Industrial machinery
114	Fruit	627	Insulation
511	Fuel, diesel	641	Iron products, metal
332	Fur	711	Irons, appliance
242	Furnishings: beds, mattresses		7 11
243	Furnishings, clocks		_
241	Furnishings, furniture		J
245	Furnishings: glass, ceramics, china, pottery	821	Jet skis
244	Furnishings, housewares	231	Jewelry
246	Furnishings, silverware	963	Junk (not recyclable)
241	Furniture	961	Junkyard materials
	G		
942	Games	=	L
963	Garbage	725	Laboratory supplies
523	Gas, hydrogen	625	Lamps
522	Gas, LP	118	Lard
521	Gas, natural	811	Lawn mower, riding
521	Sus, million	331	Leather

			-
625	Light fixtures		N
841	Light rail	416	Napkins
625	Lighting	521	Natural gas
212	Linens	411	Newspapers
632	Linoleum	122	Nonalcoholic beverages
121	Liquor	642	Nonferrous metal products (incl. aluminum)
135	Livestock	542	Nonhazardous chemicals
522	LP gas	851	Nonmotorized vehicles
232	Luggage	132	Nuts
311	Lumber		
			0
	M	0.5.1	_
612	Machine parts	951	Office supplies
611	Machinery, tools: industrial machinery	513	Oil, heating
612	Machinery, tools: machine parts	515	Oil, heavy
613	Machinery, tools: tools (power and hand)	514	Oil, motor
411	Magazines (power and name)	723	Optical products
643	Magnesium products	932	Ordnance
225	Makeup (cosmetics)	932	Ordnance, explosives, fireworks: ammunition
242	Mattress	933	Ordnance, explosives, fireworks: explosives
112	Meat products	934	Ordnance, explosives, fireworks: fireworks
116	Meat, deli products	931	Ordnance, explosives, fireworks: guns
722	Medical supplies	935	Ordnance, explosives, fireworks: rockets, missiles
721	Medical, laboratory products: dental supplies	341	Ore
725	Medical, laboratory products: laboratory supplies	945	Outdoor products
723			
	Medical, laboratory products: medical supplies		P
723	Medical, laboratory products: optical products	416	-
724	Medical, laboratory products: veterinary supplies	416	Packaged paper products: stationery, copier paper,
923	Merchandise, used	0.1.2	napkins, toilet paper.
643	Metal products, combustible (incl. magnesium,	912	Packing materials
(11	titanium)	635	Paint
641	Metal products: iron, steel	913	Pallets
642	Metal products, nonferrous metal (incl. aluminum)	412	Paper products, books
811 935	Minibikes Missiles	415	Paper products, cardboard
955 951		413	Paper products, greeting cards
951	Mixed sales products, office supplies	411	Paper products: newspapers, magazines
	Mixed sales products, restaurant supplies	416	Paper products: packaged paper, stationery
841	Monorails	414	Paper products, rolled paper
811	Motor homes	416	Paper towels
514	Motor oil	533	Peat
811	Motor vehicles: automobiles, trucks, buses, recre-	225	Perfume
012	ational vehicles, riding mowers, farm vehicles	821	Personal watercraft
812	Motor vehicles, construction	137	Pesticides
813	Motor vehicles, parts (not tires)	136	Pets
814	Motor vehicles, tires	544	Pharmaceuticals
811	Motorcycles	714	Photographic film, supplies
811	Mowers, lawn (riding)	623	Pipes
932	Munitions	131	Plants
941	Musical instruments	343	Plastics
		623	Plumbing supplies
		112	Pork, meat products

245	Pottery	963	Scrap (not recyclable)
116	Poultry, deli products	132	Seed
112	Poultry, meat products	821	Ships
613	Power tools	222	Shoes, wearable products
921	Previously owned products, antiques	323	Silk
922	Previously owned products, collectibles	246	Silverware
923	Previously owned products, used merchandise (e.g.,	952	Silverware, restaurant supplies
	flea market goods)	811	Snowmobiles
114	Produce	531	Solid fuel, coal type: charcoal
522	Propane	532	Solid fuel, coal type: coal
314	Pulp	534	Solid fuel, coal type: coke
233	Purses	533	Solid fuel, coal type: peat
		115	Spices (not salt)
	_	944	Sporting goods
	R	416	Stationery
551	Radioactive materials	641	Steel products
712	Radios	712	Stereos
842	Rail equipment	245	Stoneware
841	Rail: trains, light rail	624	Stone-working materials
841	Rapid transit	711	Stoves
344	Raw materials, other: fiberglass	133	Straw
341	Raw materials, other: ore	841	Subway
343	Raw materials, other: plastics	115	Sugar
342	Raw materials, other: rubber	232	Suitcase
345	Raw materials, other: salt		
712	Receivers		
713	Records, vinyl		T
943	Recreation, arts products: art supplies, artwork	713	Tapes: cassette, video
945	Recreation, arts products: camping, hiking, outdoor	517	Tar
	products	712	Telephones
942	Recreation, arts products: hobby, crafts	712	Televisions
941	Recreation, arts products: musical instruments	633	Tile, ceramic
944	Recreation, arts products: sporting goods	632	Tile, linoleum
811	Recreational vehicles	312	Timber
962	Recyclable materials	814	Tires
711	Refrigerators	643	Titanium products
517	Resin	134	Tobacco crops
952	Restaurant supplies (not food)	416	Toilet paper
935	Rockets	226	Toiletries
414	Rolled paper	613	Tools, power and hand
421	Rope	942	Toys
342	Rubber	811	Trailers, camper
963	Rubbish	841	Trains
631	Rugs	626	Transformers
	o de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	963	Trash (not recyclable)
	_	131	Trees
	S	813	Truck parts (not tires)
821	Sailboats	811	Trucks
345	Salt	851	Tricycles
628	Sandpaper	421	Twine
233	Satchels		
315	Sawdust		
311	Sawn wood		

	U		W
851	Unicycles	233	Wallets
923	Used merchandise	634	Wallpaper
952	Utensils, restaurant supplies	231	Watches
		821	Watercraft
		221	Wearable products, clothes
	V	223	Wearable products, eyeglasses
711	Vacuum cleaners	222	Wearable products, footwear
114	Vegetables	225	Wearable products: perfumes, colognes, cosmetics
813	Vehicle parts (not tires)	226	Wearable products, toiletries
814	Vehicle tires	121	Wine (incl. wine coolers)
812	Vehicles, construction	626	Wire, electrical
811	Vehicles, farm	315	Wood chips
851	Vehicles, nonmotorized	313	Wood products, cork
811	Vehicles, recreational	311	Wood products: lumber, sawn wood
724	Veterinary supplies	314	Wood products, pulp
712	Video cassette recorders	315	Wood products: sawdust, wood chips
713	Video tapes	312	Wood products, timber
		322	Wool

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Area of Fire Origin and Specific Location at Time of Injury Codes

A	44	Bank vault
Air conditioning duct	23	Bar area
<u> </u>	28	Barber shop
*	22	Barracks, >5 persons
	43	Basement, storage
*	36	Basketball court, stage area
,	25	Bathroom
<u> </u>	45	Bay, loading
•	28	Beauty salon
-	21	Bedroom, <5 persons
	22	Bedroom, >5 persons
,	23	Beverage service area
	41	Bin, storage
, •	62	Boiler room
	92	Boulevard, on or near
<u> </u>	12	Bowling alley, assembly area without fixed seats,
·		>100 persons
•	36	Boxing ring, stage area
1	85	Bridge, ship
		C
В		Cab of truck
Backstage		Cable duct
Balcony, exterior		Cafeteria
Ballroom, assembly area without fixed seats, >100		Canteen area
persons	82	Cargo area, vehicle
	Air conditioning duct Air enclosure, pressurized Air shaft Aircraft cockpit Arena, assembly area with fixed seats, >100 persons Art gallery Ash pit Assembly area with fixed seats, >100 persons Assembly area without fixed seats, <100 persons Assembly area without fixed seats, >100 persons Assembly area without fixed seats, >100 persons Assembly area, manufacturing Assembly, ceiling and floor Attic, sleeping Attic, storage Attic, vacant Auditorium, assembly area with fixed seats, >100 persons Avenue, on or near Awning B Backstage Balcony, exterior Ballroom, assembly area without fixed seats, >100	Air conditioning duct Air enclosure, pressurized Air shaft Aircraft cockpit Arena, assembly area with fixed seats, >100 persons Art gallery Ash pit Assembly area with fixed seats, >100 persons Assembly area without fixed seats, <100 persons Assembly area without fixed seats, >100 persons Assembly area without fixed seats, >100 persons Assembly area without fixed seats, >100 persons Assembly area, manufacturing Assembly, ceiling and floor Attic, sleeping Attic, storage Attic, vacant Auditorium, assembly area with fixed seats, >100 persons Avenue, on or near Awning B Backstage Balcony, exterior Ballroom, assembly area without fixed seats, >100 23 Ballroom, assembly area without fixed seats, >100 23 Ballroom, assembly area without fixed seats, >100

Area/Location Codes (Cont'd)

	,		
47	Carport	33	Dentist's treatment room
73	Ceiling and floor assembly	23	Dining room
74	Ceiling and roof assembly	56	Display window
66	Cell	45	Dock, loading
11	Chapel, assembly area with fixed seats, >100 persons	33	Doctor's treatment room
25	Checkroom	22	Dormitory, >5 persons
38	Chemical reactor	36	Dressing room, stage area
74	Church steeple	92	Driveway
11	Church, assembly area with fixed seats, >100 persons	55	Duct: cable, heating, exhaust, air conditioning, venti-
54	Chute: laundry, mail		lation
46	Chute: rubbish, trash, waste (incl. compactor and	51	Dumbwaiter shaft
	garbage areas)		
11	Classroom, assembly area with fixed seats, >100		_
	persons		E
13	Classroom, assembly area without fixed seats, <100	01	Egress, means of: corridor, hallway, mall
	persons	05	Egress, means of: entranceway, lobby
25	Cloak room	02	Egress, means of: exterior stairway, fire escape
42	Closet	04	Egress, means of: interior/exterior escalator
38	Coating, painting area: production	03	Egress, means of: interior stairway
85	Cockpit	63	Electrical panel area
41	Cold storage room	35	Electronic equipment area
14	Common room	61	Elevator machinery room
46	Compactor	51	Elevator shaft
35	Computer room	93	Enclosed porch
73	Concealed floor/ceiling space	67	Enclosure with pressurized air
74	Concealed roof/ceiling space	83	Engine area
75	Concealed wall space	61	Engine room
52	Conduit	05	Entranceway
96	Construction area	04	Escalator, exterior and interior
41	Container, storage	28	Exercise area
46	Container: rubbish, trash, waste (incl. compactor	55	Exhaust duct
	and garbage areas)	16	Exhibit hall
85	Control area (separate) of transportation equipment	86	Exposed vehicle surface
35	Control room or center	72	Exterior balcony
58	Conveyor	04	Exterior escalator
24	Cooking area	02	Exterior ramp, stairway
01	Corridor	77	Exterior roof surface
93	Courtyard	76	Exterior trim
71	Crawl space	86	Exterior vehicle surface
74	Crawl space above top story	76	Exterior wall surface
73	Crawl space between stories		
74	Cupola		-
	•		F
	_	14	Family room
	D	94	Farmland
12	Dance hall, assembly area without fixed seats, >100	94	Field
	persons	02	Fire escape
32	Dark room	33	First aid area (minor procedures)
35	Data processing center	73	Floor and ceiling assembly
43	Dead storage	05	Foyer
93	Deck	84	Fuel line, tank
14	Den	62	Furnace room

Area/Location Codes (Cont'd)

0			
	G	14	Living room
16	Gallery, art	82	Load-carrying area, vehicle
47	Garage	45	Loading area, bay, dock
46	Garbage chute	05	Lobby
83	Gear, running	25	Locker room
14	Great room	21	Lockup, <5 persons
12	Gymnasium, assembly area without fixed seats, >100	14	Lounge
	persons	23	Lunchroom
	н		M
0.1		38	Machine or processing area
01	Hallway	61	Machinery room or area
61	Head house Health club workout area	54	Mail chute
28 55		45	Mail room
62	Heating duct Heating room or area	65	Maintenance shop or area
92	Highway, on or near	43	Maintenance supply room, storage
41	Holding area, storage	01	Mall
34	Hospital (major procedures)	38	Manufacturing area
33	Hospital (minor procedures)	28	Massage area
55	HVAC duct	13	Meeting room, assembly area without fixed seats,
33	Tivae duct		<100 persons
		23	Mess hall
	I	11	Mosque, assembly area with fixed seats, >100 per-
12	Ice skating rink, assembly area without fixed seats,		sons
	>100 persons	97	Multiple areas
36	Ice skating rink, stage area	13	Multiuse area, assembly area without fixed seats,
64	Incinerator area		<100 persons
46	Industrial waste container	12	Multiuse area, assembly area without fixed seats,
04	Interior escalator		>100 persons
03	Interior ramp, stairway	16	Museum
		14	Music room
	J		N.
21	Jail cell, <5 persons		N
		33	Nurse's office at school
	K		0
24	Kitchen	0.7	•
		27	Office
	L	94	Open area, outside: farmland, field, lawn, park, vacant lot
35	Laboratory, computer	34	Operating room or theater, surgery area
31	Laboratory, technical	85	Operator area (separate) of transportation equipment
26	Laundry area	81	Operator area of transportation equipment
54	Laundry chute	25	Outhouse
25	Lavatory	94	Outside, open area
94	Lawn		
11	Lecture hall, assembly area with fixed seats, >100 persons		Р
16	Library	45	Packing area
53	Light shaft	65	Paint shop or area
84	Line, fuel	38	Painting, coating area: production

Area/Location Codes (Cont'd)

	a, Location Couco (Cont a)		
43	Pantry		S
94	Park	15	Sales area
92	Parking lot, on or near	25	Sauna area
81	Passenger area of transportation equipment	53	Shaft: air, light
94	Pasture	51	Shaft: dumbwaiter, elevator
21	Patient room, <5 persons	52	Shaft: pipe, ventilation
22	Patient room, >5 persons	85	Ship bridge
93	Patio	45	Shipping area
36	Performance area, stage	65	Shop: maintenance, paint, repair, work
28	Personal service area	25	Shower room
32	Photography area	15	Showroom
52	Pipe shaft	14	Sitting room
93	Porch, enclosed	21	Sleeping area, <5 persons
72	Porch, unenclosed	22	Sleeping area, >5 persons
25	Portable toilet	75	Space, concealed wall
25	Powder room	73	Space, crawl, between stories
67	Pressurized air enclosure	71	Space, crawl, substructure
32	Printing area	37	Spotlight area
21	Prison cell, <5 persons	65	Spray painting shop or area
25	Privy	38	Spray painting, production
38	Processing or machine area	36	Stage
37	Projection room	37	Stage light area
92	Public way, on or near	02	Stairway, exterior
61	Pump room	03	Stairway, interior
	•	74	Steeple
	_	41	Storage (bin, tank)
	R	43	Storage area (basement, tool room, supply room)
35	Radar room	47	Storage area, vehicle (carport, garage)
91	Railroad right-of-way, on or near	82	Storage area, vehicle (trunk)
02	Ramp, exterior	44	Storage vault
03	Ramp, interior	15	Store
94	Range land	92	Street, on or near
45	Receiving area	98	Structural area, vacant
44	Records storage room	71	Substructure area or space
34	Recovery room, surgery area	43	Supplies or tools: storage
14	Recreation room	34	Surgery area (major procedures)
61	Refrigeration room	33	Surgery area (minor procedures)
96	Renovation area	17	Swimming pool
65	Repair shop or area	63	Switchgear area
25	Restroom	11	<u> </u>
91	Right-of-way, on or near railroad	11	Synagogue, assembly area with fixed seats, >100
12	Roller skating rink, assembly area without fixed seats, >100 persons		persons
74	Roof and ceiling assembly		T
74	Roof member	0.4	T
77	Roof surface, exterior	84	Tank, fuel
46	Rubbish chute, container (incl. compactor and gar-	41	Tank, storage
TU	bage areas)	35	Telephone booth, equipment
83	Running gear	14	Television room
o J	Manning Rear	11	Temple, assembly area with fixed seats, >100 persons
		93	Terrace
		66	Test cell

Area/Location Codes (Cont'd)

11	Theater, assembly area with fixed seats, >100 persons	84	Vehicle fuel tank, line
92	Thoroughfare, on or near	81	Vehicle passenger area
25	Toilet, portable	83	Vehicle running gear, wheel area
43	Tool room, storage	47	Vehicle storage area (carport, garage)
63	Transformer vault	82	Vehicle, cargo/trunk area
85	Transportation equipment control area	55	Ventilation duct
84	Transportation equipment fuel area	52	Ventilation shaft
46	Trash chute, container (incl. compactor and garbage		
33	areas) Treatment: first aid area, surgery area (minor		W
33	procedures)	14	Waiting room
82	Trunk area, vehicle	75	Wall assembly
02	ii diik arca, veinere	76	Wall surface, exterior
		22	Ward, >5 persons
	U	26	Wash room
96	Under construction and renovation areas	46	Waste chute, container (incl. compactor and garbage
72	Unenclosed porch		areas)
52	Utility conduit	62	Water heater area
	,	65	Welding area for maintenance
	.,	38	Welding with production
	V	83	Wheel area
94	Vacant lot	95	Wildland
98	Vacant structural area	56	Window, display
44	Vault: records, storage	95	Woods
63	Vault, transformer	38	Workroom, production
85	Vehicle control area, non-passenger	65	Workshop or area
83	Vehicle engine area		-
86	Vehicle exterior/exposed surface		

Item First Ignited *and* **Item Contributing Most to Flame Spread Codes**

	Α	51	Barrel
65	Accelerant	51	Basket
18	Acoustical insulation within structural area	18	Batts, acoustical/thermal insulation within structural
16	Acoustical tile, ceiling		area
93	Adhesive	32	Bedding
61	Aerosol	83	Belt: conveyor, drive
71	Agricultural crop	22	Bench, not upholstered
74	Animal	23	Bench, work
34	Apparel not on person	43	Billboard
35	Apparel on person	32	Blanket
25	Appliance housing, casing	36	Blind
61	Atomized liquid	13	Blinds, external
46	Awning	18	Boards, acoustical/thermal insulation within struc-
	8		tural area
		91	Book
	В	23	Bookcase
51	Bag	51	Box
56	Baled goods, material	26	Broom
86	Barbed wire fence	73	Brush, heavy vegetation

Items Ignited Codes (Cont'd)

	- 3 - 3		_
26	Brush: paint, dusting	66	Duct
57	Bulk storage	67	Duct covering (incl. insulating materials whether for
			acoustical or thermal purposes, and whether inside
	C	0.4	or outside the duct)
23	Cabinet, cabinetry	94	Dust
81	Cable insulation	26	Duster
46		88	Dynamite
14	Carpet		
51	Carpet Carton, case		E
25	Casing, appliance	12	Eave
16	Ceiling covering, lining	32	Electric blanket
72	Chaff	81	Electrical insulation, wire
22	Chair, not upholstered	25	Equipment housing
21	Chair, not uphoistered Chair, upholstered	68	Equipment nousing Evaporative cooler pads
23	Chest of drawers	94	Excelsior
86	Chicken wire fence	88	Explosives
95	Chimney film or residue	11	Explosives Exterior roof covering, surface, finish
93 44	Chips, wood	13	Exterior from (incl. doors, porches, platforms)
41	Christmas tree	12	Exterior wall covering, surface, finish
26	Cleaning cloth, fluids, supplies	1 2	Exterior wan covering, surface, minsh
26	Cleaning utensils		
34	Clothing not on person		F
35	Clothing on person	37	Fabric goods
32	Comforter	59	Fabric, rolled
72	Compost	77	Feathers, not on bird or animal
66	Conduit	86	Fence
67	Conduit covering (incl. insulating materials whether	87	Fertilizer
07	for acoustical or thermal purposes, and whether	94	Fiber
	inside or outside the conduit)	18	Fibers, acoustical/thermal insulation within struc-
51	Container		tural area
83	Conveyor belt	92	Files, paper
76	Cooking materials (incl. edible materials for man or	23	Filing cabinet
70	animal) (not cooking utensils)	95	Film: paint, resin, chimney residue
54	Cord	68	Filter
21	Couch	88	Firecracker, fireworks
51	Crate	74	Fish
71	Crops	65	Flammable gas/liquid, fuels (not contained)
23	Cupboard	64	Flammable gas/liquid, in or escaping from container
36	Curtain		or pipe
30	Curum	62	Flammable gas/liquid, in or escaping from engine or
			burner
	D	63	Flammable gas/liquid, in or escaping from final con-
21	Davenport		tainer or pipe before engine or burner
42	Decoration	14	Floor covering
23	Desk	14	Flooring
21	Divan	26	Fluids, cleaning
13	Door, external	73	Forest
23	Drainboard	74	Fowl
36	Drapery	17	Framing: building, structural
23	Dresser	71	Fruit crop
83	Drive belt	62	Fuel, flammable, from engine or burner

Items Ignited Codes (Cont'd)

	• ,		
65	Fuel, uncontained/spilled	65	Liquid fuel, gas (flammable, uncontained/spilled)
77	Fur, not on bird or animal	61	Liquid, atomized, vaporized
21	Furniture, upholstered	18	Loose fills, thermal acoustical insulation within structural area
		38	Luggage
	G	17	Lumber in place
45	Game	17	Lumber in place
63	Gas, flammable liquid from container or pipe before		
	engine or burner		M
64	Gas, flammable, from container or pipe (not engines,	92	Magazine
	burners, or their fuel systems)	15	Mantle
62	Gas, flammable liquid from engine or burner	87	Manure
65	Gas, flammable liquid, uncontained/spilled	14	Mat
37	Goods not made up	58	Material stored on pallets
72	Grass	52	Material used to make a product (incl. raw materials used as input to a manufacturing or construction process)
	Н	59	Material, rolled or wound
77	Hair, not on bird or animal	31	Mattress
72	Hay		
32	Heating pad	26 72	Mops, cleaning utensils
73	Heavy vegetation	12	Mulch
66	Hose		
67	Hose covering (incl. insulating materials whether for		N
07	acoustical or thermal purposes, and whether inside	72	Needles, light vegetation
	or outside the hose)	92	Newspaper
26	Household utensils	92	Newsprint, not rolled
75	Human	59	Newsprint, rolled
7.5	Haman	37	rvewsprint, roned
	1		0
81	Insulation: electrical, cable	82	Oil, transformer
18	Insulation, acoustical/thermal within structural area	97	Oily rags
16	Interior ceiling covering	71	Orchard crop
15	Interior wall covering (not curtains, drapes)	25	Organ case
24	Ironing board	43	Outdoor sign
24	noming board	43	Outdoor sign
	K		Р
26	Kitchen utensils	55	Packing material
		68	Pads, evaporative
		95	Paint film or residue
	L	53	Pallet, empty
33	Laundry	58	Palletized material
72	Leaves	15	Paneling, wood
72	Light vegetation (not a crop)	92	Paper
33	Linen (not bedding)	59	Paper, rolled
16	Lining, ceiling	23	Piano
94	Lint	31	Pillow
63	Liquid fuel, gas (flammable, from container or pipe	66	Pipe
	before engine or burner)	67	Pipe covering (incl. insulating materials whether for
64	Liquid fuel, gas (flammable, from container or pipe)	0,	acoustical or thermal purposes, and whether inside
	(not engines, burners, or their fuel systems)		or outside the pipe)
62	Liquid fuel, gas (flammable, from engine or burner)	13	Platform
	, , , , , , , , , , , , , , , , , , , ,	1 3	1 14(1/VI III

Items Ignited Codes (Cont'd)

	,		
86	Pole	73	Timber, standing
13	Porch	84	Tire
88	Pyrotechnics	33	Towel
		45	Toy
	D	82	Transformer (incl. transformer fluids)
2.4	R	96	Trash
26	Rags, cleaning utensils	73	Trees
97	Rags, oily	13	Trim, exterior
85	Railroad ties	54	Twine
95	Residue: paint, resin, chimney film		
59	Rolled material (paper, fabric)		U
11	Roof covering, exterior		•
54	Rope	21	Upholstered furniture
96	Rubbish	26	Utensil: kitchen, cleaning
14	Rug		
			V
	S	<i>(</i> 1	<u>-</u>
		61	Vaporized liquid
55	Sacking	83	V-belt
94 21	Sawdust	71 73	Vegetable crop
32	Seat cushion, automobile	73 72	Vegetation, heavy
	Sheet Shelf	21	Vegetation, light Vehicle seat
23 12		2.1	venicie seat
	Siding		
43	Sign		W
53	Skid, empty	12	Wall covering, exterior
21	Sofa	15	Wall covering, exterior Wall covering, interior (not curtains, drapes)
26	Sponges, cleaning utensils	96	Waste
14	Stair covering	51	Wastebasket
17	Stair supports	34	Wearing apparel not on person
52	Stock for making products	35	Wearing apparel on person
56	Storage, baled material	72	Weeds
57	Storage, bulk	73	Wildland product
58	Stored material, palletized	13	Window sash
17	Structural framing, member	26	Wiping cloth
11	Surface, exterior roof	81	Wire, electrical
12	Surface, exterior sidewall	44	Wood chips
14	Surface, floor	15	Wood paneling
16	Surface, interior ceiling	11	Wood shingle roof
15	Surface, interior wall	17	Woodwork, structural
		23	Work bench
	T	59	Wound material (paper, fabric)
23	Table	55	Wrapping material
33	Tablecloth	92	Writing paper
36	Tapestry	72	Witting paper
47	Tarpaulin		
47	Tent		Υ
18	Thermal insulation within structural area	37	Yard goods
14	Tile, floor	54	Yarn
1 T	1110, 11001		

Type of Material First Ignited *and* **Type of Material Contributing Most to Flame Spread Codes**

	Α	25	Coal oil
22		67	Coated paper
22	Acetic acid: glacial Acetone	55	Cocofilm
		55	Coconut fiber
14	Acetylene gas	56	Coke
22	Acrylic acid	36	Combustible metal: magnesium, potassium, sodium,
34	Adhesive	3.0	titanium, zirconium
22	Alcohol, ethyl	34	Contact cement
24	Alcohol, propyl	27	Cooking oil
37	Ammonium nitrate	52	Cork
13	Anesthetic gas	55	Corn
53	Animal skin	27	Corn oil
34	Asphalt	55	Cotton
86	Asphalt-treated material (siding)	71	
		26	Cotton yarn, fabric, finished goods Cottonseed oil
	В		
		34	Creosote
55	Barley	26	Creosote oil
65	Beaverboard	20	Crude petroleum
10	Benzene		
10	Benzol		D
34	Bitumen	25	Diesel fuel
71	Blends: fiber, fabrics	23	Diesei luei
56	Briquettes		
22	Butadiene		E
12	Butane	34	Elemi
31	Butter	21	Ether
24	Butyl alcohol	21	Ethyl ether
		10	Ethylene
	C	10	Ethylene oxide
2.7	_	61	Excelsior
27	Canola oil	37	Explosives
71	Canvas, non-waterproof	37	Lapiosives
34	Carbon		
56	Carbon black briquettes		F
10	Carbon disulfide	71	Fabric, finished goods
10	Carbon monoxide	77	Fabric: plastic coated, vinyl
68	Cardboard	31	Fat
67	Cellulose	55	Feathers
34	Cement, contact	55	Felt
56	Charcoal briquettes	71	Fiber
65	Chipboard	55	Fiber: natural, silk, vegetable
61	Chips, wood	65	Fiber, wood
21	Class IA flammable liquid	65	Fiberboard
22	Class IB flammable liquid (not gasoline)	71	Finished goods: fabric, fiber
24	Class IC flammable liquid	27	Fish oil
25	Class II combustible liquid	55	Flax
26	Class IIIA combustible liquid	57	Flour
27	Class IIIB combustible liquid	57 57	Food (not fat or grease)
71	Cloth	25	Fuel oil No. 1 and No. 2
56	Coal	23	1 del on 110. 1 and 110. 2

Type of Material Codes (Cont'd)

		'/	_
26	Fuel oil No. 4, No. 5, and No. 6		L
74	Fur fabric, finished goods	22	Lacquer
26	Furfural	35	Lacquer, applied
		31	Lard
	G	53	Leather
14	Gas, acetylene	81	Linoleum
13	Gas, anesthetic	27	Linseed oil
12	Gas, LP	25	Liquid, combustible: Class II
11	Gas, natural	26	Liquid, combustible: Class IIIA
23	Gasoline	27	Liquid, combustible: Class IIIB
34	Gelatin	21	Liquid, flammable: Class IA
34	Glue	22	Liquid, flammable: Class IB
55	Grain	24	Liquid, flammable: Class IC
31	Grease, food	23	Liquid, flammable: gasoline
32	Grease, non-food	12	LP gas
67	Ground-up processed paper used as thermal insula-	32	Lubricant grease
	tion	27	Lubricating oil
		63	Lumber, finished
	Н		M
76	Hair, human	36	Magnesium
75	Hairpiece	71	Man-made fabric, fiber (not fur and silk)
65	Hardboard	50	Manure
54	Hay	31	Margarine
55	Hemp	11	Marsh grass
55	Hessian	36	Metal, combustible: magnesium, potassium, sodium,
55	Hops	30	titanium, zirconium
76	Human hair	11	Methane
27	Hydraulic fluid	22	Methyl ethyl keytone
22	Hydrazine	27	Mineral oil
15	Hydrogen	27	Miletal Off
			N
	. I	22	Naphtha: V.M. & P., regular
67	Insulation, newsprint	55	Natural fiber
61	Insulation, processed wood	11	Natural gas
		51	Natural rubber
	J	67	Newsprint used as thermal insulation
2.2	Jet fuel, JP–4	71	Nylon fabric
22 25			,
25 55	Jet fuel, JP–5 and –6		
33	Jute		0
		55	Oats
	K	27	Oil: canola, cooking, corn, fish, linseed, lubricating,
55	Kapok		mineral, tallow, transformer, vegetable
34	Kauri	25	Oil: coal, range
25	Kerosene	26	Oil: creosote, No. 6 fuel
		82	Oilcloth
			P
		22	Paint
		35	Paint, applied
			· TT -

Type of Material Codes (Cont'd)

	•	-	
67	Paper	55	Soy bean
33	Paraffin	57	Starch
65	Particleboard	54	Straw
34	Paste	63	Structural material, wood
56	Peat	24	Styrene
		34	Sulfur
21	Pentane		
32	Petroleum jelly	71	Synthetic fiber
20	Petroleum, crude	41	Synthetic rubber
26	Phenol		
37	Phosphorus		
67	Photographic paper		T
62	Pile, wood: round	31	Tallow
34	Pitch	27	Tallow oil
41	Plastic	34	Tar
77	Plastic-coated fabric		
64	Plywood	71	Textile products
		67	Thermal insulation, newsprint
62	Pole, wood: round	62	Timber, round: piles, poles, posts
33	Polish	51	Tire rubber
62	Post, wood: round	36	Titanium
36	Potassium	58	Tobacco
65	Presswood	22	Toluol, toluene
12	Propane	75	Toupee
24	Propyl alcohol	27	Transformer oil
66	Pulp, wood	67	Treated paper
			* *
		24	Turpentine
	R		
2.0			1/
38	Radioactive material		V
55	Ramie	22	Varnish
25	Range oil	35	Varnish, applied
71	Rayon	55	Vegetable fiber
67	Records, paper	27	Vegetable oil
61	Residue, wood	10	Vinyl chloride
34	Resin	77	Vinyl fabric
86	Roofing, asphalt	//	VIIIYI IADITC
63	Roofing, wood shingles		
34	Rosin		VA/
62	Round timber: piles, poles, posts		W
51	Rubber, natural	67	Waste paper
		33	Wax
41	Rubber, synthetic	67	Waxed paper
		55	Wheat
		75	Wig
	S	61	Wood chips, flour, sawdust, shavings, residue, pro-
61	Sawdust	<i>(</i> 2	cessed (insulation), structural material
63	Sawn wood (incl. all finished lumber)	62	Wood pile, pole, post: round
67	Sensitized paper	66	Wood pulp, fiber
61	Shavings, wood	65	Wood, low-density pressed
22	Shellac	63	Wood, roofing shingles, sawn, finished, split, struc-
63	Silcilac		tural
	Chinales wood		1
Г?	Shingles, wood	71	Wool
53	Shoe leather	71	Wool
86	Shoe leather Siding, asphalt	71	
86 74	Shoe leather Siding, asphalt Silk fabric, finished goods	71	Wool Y
86 74 55	Shoe leather Siding, asphalt Silk fabric, finished goods Sisal		
86 74 55 53	Shoe leather Siding, asphalt Silk fabric, finished goods Sisal Skin, animal	71	Y
86 74 55	Shoe leather Siding, asphalt Silk fabric, finished goods Sisal		Y
86 74 55 53	Shoe leather Siding, asphalt Silk fabric, finished goods Sisal Skin, animal		Y Yarn
86 74 55 53 36	Shoe leather Siding, asphalt Silk fabric, finished goods Sisal Skin, animal Sodium		Y

Equipment Involved in Ignition *and* **Equipment Involved in Release Codes**

	Α	841	Brush, hair
223	Adapter, electrical	316	Buffer
721	Adding machine	833	Buffer, floor
513	Agricultural elevator, conveyor	875	Bug zapper
341	,	238	Bulb, electric
	Air compressor	333	Bunsen burner
111	Air conditioner	862	Burglar alarm
881	Airplane, model	333	Burner, Bunsen
862	Alarm, burglar	523	Burner, weed
748	Amplifier, stereo	373	Butane regulator
431	Amusement ride equipment	373	Butune regulator
722	Answering machine		
444	Arcade game (not electronic)		C
253	Arrester, grounding device	751	Cable converter box
871	Ashtray	362	Cable power transfer equipment
325	Asphalt-saturating coating machine	721	Calculator
343	Atomizing equipment (not paint spraying equip-	756	Camcorder
	ment)	757	Camera (incl. digital)
747	Audio speakers	621	Can opener
536	Auger, post hole	443	Candy vending machine
514	Auger, screw/sweep	635	Canner, pressure
		377	Car washing equipment
	В	371	Carding machine
0.5.1		832	Carpet cleaner
851	Baby bottle warmer	723	Cash register
234	Ballast, fluorescent lighting	355	Casting equipment
643	Barbecue grill	414	CAT scan imaging equipment
152	Baseboard heater (electric/hot water)	142	Catalytic heater
731	Bass	741	CD player, audio
229	Battery (all types)	712	CD-ROM device, external
228	Battery charger, rectifier	113	Ceiling fan
365	Bearing	132	•
411	Bed, powered	522	Central heating unit Chain saw
362	Belt, power transfer equipment	411	
374	Bench motor	872	Chargeal lighter
852	Blanket, electric	228	Chargon bettory
515	Blender, feed	126	Chimpey briefs congrete block congrete block mod
611	Blender, food	120	Chimney: brick, concrete block, concrete block mod-
362	Block, power transfer equipment	125	ules, masonry, stone
532	Blower, leaf	125	Chimney connector
534	Blower, snow	127	Chimney, metal (incl. gas vent flue and stovepipe)
333	Blowtorch	533	Christman links
881	Boat, model	242	Christmas lights
133	Boiler: power, process, heating	873	Cigarette lighter
365	Brake	215	Circuit breaker board
216	Branch circuit, electrical	833	Cleaner, floor
641	Bread-making machine	834	Cleaner, vacuum
126	Brick chimney	891	Clock
637	Broiler, countertop	811	Clothes dryer
831	Broom, electric	855	Clothes iron
533	Brush grinder	854	Clothes steamer

•	•	•	
814	Clothes washing machine	757	Digital camera
325	Coating machine	321	Dipper, paint
612	Coffee grinder	651	Dishwasher
631	Coffee maker	712	Disk drive, external
841	Comb	356	Distilling equipment
511	Combine	215	Distribution panel
812	Compactor, trash	861	Door opener, automatic (not garage)
341	Compressor, air	863	Door opener, automatic garage
342	Compressor, gas	315	Drill, power
711	Computer	348	Drilling machinery
712	Computer CD-ROM device, tape drive	537	Driver: post, pile
713	Computer modem, external	217	Dryer receptacle
711	Computer modem, internal	811	Dryer, clothes
714	Computer monitor	845	Dryer, hair
715	Computer printer	813	Dryer/Washer combination
716	Computer projection device	654	Duct: exhaust fan, grease hood
125	Connector, chimney or vent	152	Duct, hot air
252	Control device, traffic	433	Dumbwaiter
423	Control panel with multiple TV monitors	742	DVD device, external
210	Converter		
751	Converter, cable		-
361	Conveyor (not farm)		E
513	Conveyor, farm	525	Edger, lawn
635	Cooker, pressure	251	Electric fence
646	Cooktop	213	Electric meter
117	Cooler, evaporative	244	Electric sign
117	Cooling tower	223	Electrical adapter
724	Copier, large standalone	216	Electrical branch circuit
715	Copier, multifunctional (fax, scanner)	217	Electrical outlet, receptacle (incl. dryer and stove
371	Cotton gin		receptacles)
637	Countertop broiler	211	Electrical power (utility) line (not wire from utility
346	Crane		pole to structure)
518	Cream separator	212	Electrical service supply wire; wire from utility pole
538	Cultivator		to meter box
842	Curling iron	218	Electrical switch, wall-type
314	Cutting tool, power	214	Electrical wiring from meter box to circuit breaker
332	Cutting torch		board, fuse box, or panelboard
		843	Electrolysis equipment
	D	451	Electron microscope
	D	732	Electronic piano
622	Dagger	433	Elevator
242	Decorative lights, line voltage (incl. Christmas lights)	513	Elevator, farm
243	Decorative lights, low voltage	375	Engine, internal combustion engine
642	Deep fryer	748	Equalizer, stereo
116	Dehumidifier, portable	434	Escalator
412	Dental equipment, other	117	Evaporative cooler
411	Dental powered chair, bed	654	Exhaust fan
231	Desk lamp	263	Extension cord
864	Detector, gas	358	Extractor
866	Detector: heat, smoke		
413	Dialysis equipment		
357	Digester		

	()		
	F	643	Grill
113	Fan	316	Grinder
113	Fan, ceiling	612	Grinder, coffee
654	Fan, grease duct/hood exhaust	515	Grinder, feed
513	Farm elevator, conveyor	533	Grinder: leaf, brush, wood, stump
521	Farm sprayer	219	Ground-fault interrupter
725	Fax machine	253	Grounding device
515	Feed blender, grinder, mixer	731	Guitar
251	Fence, electric	892	Gun
752	Film projector		
866	Fire alarm		н
874	Fire extinguishing equipment	0.41	
122	Fireplace, factory-built	841	Hair brush
123	Fireplace, insert/stove	844	Hair curler warmer
121	Fireplace, masonry	845	Hair dryer
232	Flashlight	235	Halogen lamp, lighting fixture
714	Flat-screen computer monitor	317	Hammer, power
833	Floor buffer, cleaner, waxer	711	Hard drive, internal
141	Floor furnace	512	Hay processing equipment
231	Floor lamp	866	Heat detector
234	Fluorescent lighting fixture	144	Heat lamp
611	Food mixer, processor	152	Heat pipe
632	Food warmer	112	Heat pump
355	Forging equipment	145	Heat tape
652	Freezer (separate from refrigerator)	141	Heater (not catalytic, oil-filled, or baseboard heater)
656	Freezer/Refrigerator	152	Heater, baseboard (electric/hot water)
433	Freight elevator	142	Heater, catalytic
639	Frying pan	132	Heater, central unit
132	Furnace, central heating unit	151	Heater: hot water, waterbed
141	Furnace, floor	143	Heater, oil-filled
353	Furnace, industrial	133	Heating boiler
131	Furnace, local heating unit, built-in	853	Heating pad
333	Furnace, plumber's	124	Heating stove
215	Fuse panel board	351	Heat-treating equipment
	•	643	Hibachi
		346	Hoist
	G	242	Holiday lighting, line voltage
444	Game, arcade (not electronic)	373	Hose connectior to gas appliance
755	Game, video (electronic)	152	Hot air duct
863	Garage door opener	632	Hot plate
653	Garbage disposer	821	Hot tub
521	Garden sprayer	152	Hot water baseboard heater
358	Garnetting equipment (waste recovery machine)	151	Hot water heater
342	Gas compressor	132	Humidifier (built in to central heating system)
864	Gas detector	131	Humidifier (built in to local heating system)
348	Gas drilling equipment	114	Humidifier (not built in to heating system)
373	Gas regulator	347	Hydraulic rescue tools
127	Gas vent flue (metal chimney)		
224	Generator		1
513	Grain elevator	655	Ice maker (separate from refrigerator)
654	Grease duct/hood exhaust fan	233	Incandescent lighting fixture
638	Griddle	233	memidescent fighting fixture

Industrial conveyor 873 Lighter: cigarette, pipe	352	Incinerator	872	Lighter: charcoal, utility
Industrial furnace, oven, kiln	361	Industrial conveyor	873	,
Insect trap	353	•	234	
Instant hot water heater	875		235	
Internal combustion engine (nonvehicular) 253 Lighting facture: sodium, mercury vapor	151	Instant hot water heater	233	
Internal combustion engine (nonvehicular) 253	865	Intercom	236	
1.5 1.5	375	Internal combustion engine (nonvehicular)	253	
lights l	225		242	
State	115	Ionizer		lights)
State	855	Iron, clothes	243	Lights, decorative/landscape, low voltage
J 223 Low-voltage transformer (<51 volts) 373 LP-gas regulator Jackhammer	842	Iron, curling	514	
Jackhammer Jacking equipment, powered September Jacking equipment, powered Jacking equipment, powered Jacking equipment, powered Jacking equipment Juicer Ju			535	Log splitter
Sacking equipment, powered Sacking equipment, powered Sacking equipment Sackin			223	Low-voltage transformer (<51 volts)
Section Sect			373	LP-gas regulator
Westername	317			
Jointer 846 Makeup mirror, lighted Masonry chimney K 414 Medical equipment, other Medical maging equipment Medical powered bed, chair Meter box wire to circuit breaker board, fuse box, or panel board Meter box wire to circuit breaker board, fuse box, or panel board Meter, meter box (electric) Tell Microscope, electron Microscope, electron Microscope, electron Microscope, electron Miking machine Lamp: sodium, mercury vapor Landscape lighting, low voltage Miking machine Miki	347	0 1 1 1		
K K 410 Medical equipment, other K 411 Medical imaging equipment Medical powered bed, chair Keyboard, musical Keyboard, musical Kiln Keyboard, musical Kiln K	893	Jewelry-cleaning machine		M
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Kettle Keyboard, musical Keyboard, musical Keyboard, musical Keyboard, musical Keyboard, musical Keyboard, musical Kiln		410	* *	
Kettle 411 Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical powered bed, chair Medical power vapor fixture/lamp (incl. street lights) Meter, meter box (electric) Meter: postage, shipping Microfiche/Microfilm processing equipment Microfiche/Microfilm processing equipment Microfiche/Microfilm viewing equipment Microfiche/Microfilm viewing equipment Microfilm viewing equipment Microfiche/Microfilm viewing equipment Microfilm viewing equipment Microfiche/Microfilm viewing equipment Microfilm viewing equipment Miking machine Miking machine Miking machine Miking machine Miking machine, paint Mixer, feed		V	414	
Keyboard, musical 236 Mercury vapor fixture/lamp (incl. street lights) Kiln 214 Meter box wire to circuit breaker board, fuse box, or panel board Knife sharpener 213 Meter, meter box (electric) Meter box wire to circuit breaker board, fuse box, or panel board Meter, meter box (electric) Meter; postage, shipping Microfiche/Microfilm processing equipment Microfiche/Microfilm viewing equipment Microscope, electron Mikp asteurizer Lamp, halogen 644 Microwave oven Lamp, sodium, mercury vapor 516 Milking machine Lamp sodium, mercury vapor 516 Milking machine Landscape lighting, low voltage 846 Mirror, lighted Lantern 611 Mixer, food Mixer, food Mixer food Model vehicles Lathe 881 Model vehicles Lawn mower, powered 713 Modem, external Lawn vacuum 355 Molding equipment LCD monitor 714 Monitor, computer LCD panel 423 Monitoring station, security Motor, internal combustion engine LCD panel 423 Monitor internal combustion engine Lift (elevator): passenger, freight 524 Mower, lawn (powered) Lift, ski 533 Mulcher Light, night			415	0 1 1
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Light bulb 733 Musical keyboard, synthesizer Light switch Light, night		1 1		
218 Light switch 241 Light, night				
241 Light, night		•	/33	Musical keyboard, synthesizer
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•	N	237	Portable work light, trouble light
318		537	Post driver
373	Nail gun Natural gas regulator	727	Postage meter equipment
244	Neon lighting	536	Post-hole auger
241	Night light	636	Pot, warming
877	Novelty lighter	133	Power boiler
0//	Novelty lighter	316	Power buffer, grinder, polisher, sander
		261	Power cord, detachable from appliance
	0	262	Power cord, permanently attached to appliance
143	Oil-filled heater	314	Power cutting tool
732	Organ	315	Power drill, screwdriver
217	Outlet, electrical	317	Power hammer
645	Oven, cooking	313	Power jointer, planer, router, shaper
353	Oven, industrial	312	Power lathe
644	Oven, microwave	318	Power nail gun, stapler, stud driver
222	Overcurrent, disconnect equipment associated with a	311	Power saw
	transformer	226	Power supply, uninterruptible
752	Overhead projector	363	Power takeoff
416	Oxygen administration equipment	362	Power transfer equipment: belts, blocks, cables, ropes
	76 1 1	881	Powered model vehicle
	_	364	Powered valve
	Р	411	Powered wheelchair
321	Paint dipper	635	Pressure canner, cooker
322	Paint flow coating machine	715	Printer, computer
323	Paint mixing machine	376	Printing press
324	Paint sprayer	133	Process boiler
215	Panel board (fuse)	611	Processor, food
726	Paper shredder	716	Projector, computer
433	Passenger elevator	752	Projector: film, overhead, slide
517	Pasteurizer	373	Propane regulator
422	PBX telephone equipment	344	Pump
745	Phonograph	112	Pump, heat
442	Photo processing equipment		
757	Photographic camera and equipment		D
732	Piano		R
371	Picking machine	426	Radar equipment
537	Pile driver	417	Radiation therapy equipment
444	Pinball machine	152	Radiator, heating system
873	Pipe lighter	446	Radio telescope
152	Pipe, heat	743	Radio, AM/FM (not two-way radio)
313	Planer	744	Radio, two-way
732	Player piano	417	Radiological equipment
741	Player, CD (audio)	646	Range with or without an oven or cooking surface
742	Player, laser disk	847	Razor, electric
745	Player, record	357	Reactor
749	Player, tape	748	Receiver, stereo
261	Plug, detachable from appliance	217	Receptacle, electrical
262	Plug, permanently attached to appliance	229	Rechargeable battery
333	Plumber furnace	745	Record player
316	Polisher	749	Recorder, tape
822	Pool equipment (swimming)	656	Refrigeration equipment
634	Popcorn popper	656	Refrigerator, refrigerator/freezer

373	Regulator, gas: butane, LP, natural gas	318	Stapler, power
347	Rescue tools, hydraulic	152	Steam line
881	Rocket, model	647	Steam table
362	Rope, power transfer equipment	748	Stereo equipment (not speakers)
645	Rotisserie	418	Sterilizer, medical
313	Router	897	Sterilizer, nonmedical
325	Rubber-spreading coating machine	126	Stone chimney
832	Rug shampooer	127	Stovepipe
032	rug shampooei	124	Stove, heating
		217	<u> </u>
	S	318	Stove receptacle Stud driver
316	Sander		
821	Sauna	425	Studio-type sound recording/modulating equipment
522	Saw, chain	424	Studio-type TV camera
311	Saw, power	848	Suntan equipment, sunlamp
715	Scanner, computer	227	Surge protector
894	Scissors	822	Swimming pool equipment
514	Screw/Sweep auger	218	Switch: light, wall
315	Screwdriver, power	215	Switchboard
423	Security monitoring station	733	Synthesizer, musical
518	Separator, cream		
895	Sewing machine		T
313	Shaper	231	Table lamp
623	Sharpener, knife	647	Table, steam
847	Shaver, electric	712	Tape drive, external
		749	•
727	Shipping meter equipment		Tape player, recorder
896	Shoe polisher	145	Tape, heat
345	Shop vacuum (wet/dry)	354	Tar kettle
726 533	Shredder, paper Shredder, wood	354 631	Tarpot
			Teapot
244	Sign, electric	722	Telephone
514	Silo loader, unloader Ski lift	422	Telephone switching gear
432	Skillet	446	Telescope
639		753	Television
752	Slide projector	372	Testing equipment
636	Slow cooker	419	Therapeutic equipment
866	Smoke alarm	868	Thermostat
534	Snow blower, thrower	511	Threshing machine
443	Soda vending machine	538	Tiller
236	Sodium vapor fixture/light (incl. street lights)	876	Timer
334	Soldering equipment	637	Toaster
359	Solvent recovery equipment	637	Toaster oven
425	Sound recording/modulating equipment, studio-	849	Toothbrush, electric
021	type	333	Torch: blow, Bunsen burner, plumber furnace
821	Spa	332	Torch, cutting
141	Space heater, baseboard	331	Torch, welding
142	Space heater, catalytic	882	Toy, powered
143	Space heater, oil-filled	252	Traffic control device
747	Speakers, audio (separate components)	221	Transformer, distribution-type
535	Splitter, log	223	Transformer, low-voltage (<51 volts) (incl. adapters
519	Sprayer: farm, garden	421	for electronic equipment)
324	Sprayer, paint	421	Transmitter

Equipment Involved Codes (Cont'd)

812	Trash compactor	211	Wire, utility line
525	Trimmer, lawn	212	Wire, utility pole to meter box
237	Trouble light	639	Wok
745	Turntable	883	Wood burning kit
424	TV camera, studio-type	237	Work light
423	TV monitor array, studio-type		
744	Two-way radio		X
728	Typewriter	417	X-ray equipment
	U		
414	Ultrasound equipment		
226	Uninterrupted power supply		
514	Unloader, silo		
872	Utility lighter		
211	Utility line, electric		
	v		
024	V Vogunum alaanar		
834	Vacuum cleaner		
531 345	Vacuum, lawn Vacuum, wet/dry (shop vacuum)		
754	VCR, VCR–TV combination		
443	Vending machine		
125	Vent connector		
756	Video camera		
755	Video game		
	Ü		
	W		
638	Waffle iron		
141	Wall heater		
218	Wall switch		
632	Warmer, food		
647	Warming drawer/table		
636	Warming pot		
813	Washer/Dryer combination		
814	Washing machine, clothes		
359	Waste recovery machine		
445	Water cooler, fountain		
348	Water drilling equipment		
151	Water heater (incl. sink-mounted instant hot water		
1.5.1	heater)		
151	Waterbed heater		
833	Waxer, floor		
371	Weaving machine		
523	Weed burner		
331	Welding torch		
345	Wet/Dry vacuum (shop vacuum)		
411 821	Wheelchair, powered Whirlpool		
0 4 1	**IIIIIp001		

Wire, meter box to fuse panel/circuit board

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Appendix C

GLOSSARY OF TERMS AND ABBREVIATIONS

Appendix C

Glossary of Terms and Abbreviations

Terms

The terminology used in this document provides a common language for recording fire service data. The following terms are used as defined and discussed below.

Alarm. Any notification made to the fire department that a situation exists or may exist that requires a response.

Area of Origin. The use of the room or area within the property where the fire originated.

Automatic. As applied to fire protection devices, a device or system providing an emergency function without the necessity of human intervention.

Backfire. A fire set along the inner edge of a fire control line to consume the fuel in the path of a wildland fire or change the direction of force of the fire's convection column. Doing this on a small scale and with closer control, in order to consume patches of unburned fuel and aid control line construction, is known as "burning out."

Building. A structure enclosed with walls and a roof and having a defined height.

Building Fire. See Structure Fire.

Burning. The process of self-perpetuating combustion, with or without an open flame. Smoldering is burning.

Casualty (Fire). A person who is injured or killed at the scene of a fire. (Includes injuries or deaths from natural or accidental causes sustained while involved in the activities of fire control, rescue attempt, or escaping from the dangers of the fire.)

Census Data. Demographic population data available by statistical areas from a governmental agency.

Civilian Fire Casualty. Any non-fire service casualty who is injured or killed at the scene of a fire.

Char. Material that has been partially burned on the exterior of the object and has a blackened carbonized appearance.

Combustible. A material or structure that will release heat energy on burning.

Combustible Liquid. Any liquid having a flash point at or above 100°F (37.8°C) (closed cup).

- **Confine a Fire.** To restrict the fire within determined boundaries established either prior to the fire or during the fire. Wildland suppression action may be minimal and limited to surveillance under appropriate conditions.
- **Contain a Fire.** To take suppression action as needed that can reasonably be expected to check the fire's spread under prevailing conditions.
- **Emergency Scene.** The area encompassed by the incident and the surrounding area needed by the emergency forces to stage apparatus and mitigate the incident.
- **EMT–Basic.** Technician has the knowledge and skills of the first responder, but is also qualified to function as minimum staff for an ambulance (see Table of Care). For example, at the scene of a cardiac arrest, the EMT–Basic would be expected to defibrillate and ventilate the patient with a manually operated device and supplemental oxygen.
- **EMT–Intermediate.** Technician has the knowledge and skills of the preceding levels, but also can perform essential advanced techniques and administer a limited number of medications (see Table of Care). For example, at the scene of a cardiac arrest, the EMT–Intermediate would be expected to intubate and administer first-line ACLS medications.
- **EMT-Paramedic.** Technician has demonstrated the competencies expected of an EMT-Intermediate provider, but also can administer additional interventions and medications (see Table of Care). For example, at the scene of a cardiac arrest, the EMT-Paramedic might administer second-line ACLS medications and use an external pacemaker.
- **Explosion.** Violent bursting caused by either a combustion process or an overpressure condition. Typical combustion processes include ignition and burning of combustible gas, dust, or flammable vapor mixture. These are technically "fires." Typical overpressure conditions include steam pressure, chemical reactions, and compressed gas container rupture. These are technically not "fires."
- **Exposure Fire.** A fire in a building, structure, vehicle, or outside property resulting from a fire outside that building, structure, vehicle, or outside property.
- **Exposure (Human).** Potential for injury or death to humans.
- **Fatality.** An injury that is fatal or becomes fatal within 1 year of the incident.
- **Fire.** Any instance of destructive and uncontrolled burning, including explosion, of combustible solids, liquids, or gases. Fire does not include the following, except where they cause fire or occur as a consequence of fire:
 - Lightning or electrical discharge.
 - Rupture of a steam boiler, hot water tank, or other pressure vessel due to internal pressure and not to internal combustion.
 - Explosion of munitions or other detonating material.

- Accident involving ship, aircraft, or other vehicle.
- Overheat condition.
- **Fire Area (Structure).** The space within a structure bounded by fire division assemblies (2-hour fire rating or greater).
- **Fire Area (Wildland).** The area within wildfire perimeter control lines.
- **Fire Blackout.** That point in time when there is no longer any evidence of open flame or glow of burned material.
- **Fire Contained.** That point in time when fire spread is stopped, but the fire is not necessarily under control.
- **Fire Control Line.** Comprehensive term for all constructed or natural barriers and treated fire edges used to control a fire.
- **Fire Damage.** The total damage to a building, structure, vehicle, natural vegetation cover, or outside property resulting from a fire and the act of controlling that fire. Included are smoke, water, backfires, firebreaks, and fire control damage.
- **Fire Extinguished.** That point in time when there is no longer any abnormal heat or smoke being generated in material that was previously burning.
- **Fire Ground.** See Emergency Scene.
- **Fire Service Personnel.** All employees, whether career or volunteer, of a fire department who are assigned or may be assigned to perform duties at emergency incidents.
- **Fire Under Control.** (1) That point in time when a fire is sufficiently surrounded and quenched so that in the judgment of the commanding officer it no longer threatens destruction of additional property. (2) In wildfire, that point in time when a control line is around a fire, any spot fires therefrom, and any interior islands to be saved. Any unburned area adjacent to the fire side of the control lines are burned out, and all hot spots that are immediate threats to the control line are cooled down, until the lines can reasonably be expected to hold under foreseeable conditions.
- **First Responder.** Uses a limited amount of equipment with various knowledge and skill in each of the core elements (see EMS levels above). For example, at the scene of a cardiac arrest, the first responder would be expected to notify EMS (if not already notified) and initiate CPR with an oral airway and a barrier device.
- **Fixed Object.** An object, device, or appliance that is fastened or secured at a specific location (e.g., a steam radiator).
- **Flames.** Products of combustion that are illuminated by the heat of combustion and accompany the burning of most materials in normal atmospheres.

- **Flammable Liquid.** Any liquid having a flash point below 100°F (37.8°C) (closed cup) and having a vapor pressure not exceeding 40 psia (2068 mm Hg) at 100°F (37.8°C).
- **Gas.** A material that has a vapor pressure exceeding 40 psia (2068.6 mm) at 100°F (37.8°C). (Gasoline is a liquid, not a gas.)
- **General Property Use.** The actual general (overall) use of land or space under the same management or ownership or within the same legal boundaries, including any structures, vehicles, or other appurtenances thereon.
- **Grade.** Reference plane representing the elevation of finished ground level adjoining the building at the main entrance.
- **Hazardous Material.** Any material that is an air-reactive material, flammable or combustible liquid, flammable gas, corrosive material, explosive material, organic peroxide, oxidizing material, radioactive material, toxic material, unstable material, or water-reactive material; and any substance or mixture of substances that is an irritant or a strong sensitizer or that generates pressure through exposure to heat, decomposition, or other means.
- **Heat of Ignition.** The heat energy that brings about ignition. Heat energy comes in various forms and usually from a specific object or source. Therefore, the heat of ignition is divided into two parts: "equipment involved in ignition" and "form of heat of ignition."
- **Ignition.** The physical and chemical processes involved in reaching a point of self-perpetuation of fire whether or not there is an open flame.
- **Ignition Factor.** The condition or situation that allowed a heat source and a combustible material to combine to initiate a fire.
- **Incident.** An event to which the reporting agency responds or should have responded. Included are "walk-ins" treated at the station. An incident may have more than one response. A rekindle is a separate incident.
- **Incident Record.** The official file on an incident.
- **Incident Report.** A document prepared by fire department personnel about a particular incident. For understanding and legal purposes, this report should be in their own words. For summarization purposes, the information on this report can be classified into broad categories. The incident report is always part of the incident record or file.
- **Injury.** Physical damage to a person suffered as the result of an incident that requires (or should require) treatment by a practitioner of medicine, a registered EMT, or a paramedic within 1 year of the incident (regardless of whether treatment was actually received) or that results in at least 1 day of restricted activity immediately following the incident.

- **Latitude.** Latitude lines run east/west parallel to the equator. Values range from 0 degrees at the equator to 90 degrees at the North and South poles. The United States and Canada are in the Northern Hemisphere. Minutes and seconds range from 0 to 59.
- **Longitude.** Longitude lines run north/south, are parallel at the equator, and converge at the North and South Poles. Values ranges from 0 degrees at Greenwich, England (near London at the Royal Naval Observatory) to 180 degrees at the International Date Line west of Hawaii. Most of the United States and all of Canada are in the Western Hemisphere. Minutes and seconds range from 0 to 59.
- **Liquid.** A material that has a vapor pressure not exceeding 40 psia (2068.6 mm) at 100°F (37.8°C).
- **Material First Ignited.** The combustible that is first set on fire by the heat of ignition.
- **Mobile Property Type.** Property that was designed to be movable whether or not it still is (e.g., vehicles, ships, and airplanes).
- **Mop-Up.** The act of making a fire scene safer after the fire has been controlled, such as extinguishing or removing burning material along or near the control line, felling snags, and trenching logs to prevent rolling. For structure fires, see Overhaul.
- **Non-Fire Service Personnel.** All persons involved with an incident who are not fire service personnel. Included are police, utility company employees, non-fire service medical personnel, and civilians.
- **Not Occupied.** An area with no persons present; contents or equipment present indicates the structure is not vacant.
- **Occupancy.** The purpose for which a building or portion thereof is intended to be used. The specific property use as it pertains to a building is the occupancy.
- **Occupied.** An area with persons present. A hotel (general property use) could be occupied, but the restaurant (specific property use) not occupied; likewise, the restaurant could be occupied, but its storeroom (area of origin) not occupied.
- **Overhaul.** The act of making a fire scene safe after it is controlled, such as extinguishing or removing burned material, checking inside walls and hidden spaces, etc. For wildland fires, see Mop-Up.
- **Overheat.** Destruction of material by heat without self-sustained combustion. Removal of the heat source will stop the destruction. Overheat is the stage before ignition.
- **Overpressure.** A transient air pressure, such as the shock wave from an explosion, that is greater than the surrounding atmospheric pressure.
- **Portable.** An object, device, or appliance that can normally be moved by one person, is designed to be used in multiple locations, and requires no tools to install.

- **Prescribed Fire.** Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist prior to ignition. The controlled application of fire to wildland fuels in either their natural or their modified state under specified environmental conditions that allow the fire to be confined to a predetermined area and, at the same time, to produce the intensity of heat and rate of spread required to attain planned resource management objectives.
- **Principal Meridian.** There are 45 principal meridians defined in the United States. They are identified at the end of this appendix.
- **Property.** A thing of value. Specific (fixed) property refers to those things that make up the Earth's surface (e.g., water, land, roadways, structures, buildings). Mobile property refers to those things that normally move in relation to the Earth's surface (e.g., ships, airplanes, trains, trucks, automobiles).
- **Property Inventory.** Information known about a property before an emergency occurs. This knowledge is in two parts: that which is general in character and has to do with external features (such as location, water supply, and construction), and that which is specific in character relating to internal features (such as interior finish, vertical openings, or suppression systems).
- **Property Use.** The use to which a property is put. A building, for example, could serve as a garage or a hospital or a department store. The use of property does not define any of the other important fire-related details of a property such as access, ownership, size, internal weaknesses in fire defense, or construction.
- **Public Land Survey System.** The Land Ordinance of 1785 established the Public Land Survey System in the United States. The surveys cover 30 States; other survey systems are used by the founding 13 States, Kentucky, Tennessee, Maine, Vermont, West Virginia, Texas, and Hawaii.
- **Range.** Ranges are numbered east and west of the principal meridian. The first three digits are the range number and the fourth digit indicates a full or partial range (0 = full, 1 = 1/4, 2 = 1/2, and 3 = 3/4). The fifth character (E or W) indicates direction from the principal meridian.
- **Rekindle.** The redevelopment of a fire after it was thought to have been extinguished by the original fire service response. Fire service response to a rekindle should be treated as a separate incident.
- **Reportable Fire.** Any unfriendly, hostile fire that comes to the attention of an agency keeping fire records. Included are fires that may be discovered in progress or discovered after extinguishment.
- **Response.** The deployment of an emergency service resource to an incident.
- **Room.** The space or area bounded by walls. The walls may be fire rated and impede fire spread or not fire rated (e.g., mesh screen), which may impede exiting of personnel.

- **Scorch.** Discoloring (browning or blackening) of a material, a characteristic of the overheat condition. Removal of the heat source will stop the destruction.
- **Section.** Sections are numbered 1–36 beginning in the northeast corner for all but the very earliest principal meridians. Sections 1–6 are the northern most tier and are numbered east to west. Sections 7–12 are the next tier south of the first tier and are numbered west to east. The remaining sections follow the same pattern. Each section is nominally 640 acres, although some sections vary from the standard.
- **Smoldering.** Self-sustaining combustion of a material without any flame evident.
- **Stationary Object.** Any object, device, or appliance that is not fastened but that is not readily moved from one place to another in normal use (e.g., a refrigerator).
- **Story.** That portion of a building between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story is that portion of a building between the upper surface of the topmost floor and the upper surface of the roof deck above.
- **Structure.** An assembly of materials forming a construction for occupancy or use to serve a specific purpose. This includes, but is not limited to, buildings, open platforms, bridges, roof assemblies over open storage or process areas, tents, air-supported structures, and grandstands.
- **Structure Fire.** Any fire inside a structure whether it involves the structure or not, or any fire under or touching a structure that involves the structure.
- **Subsection.** Sections can be subdivided into successive quarters and described as the NE quarter, NW quarter, SE quarter, and SW quarter (each approximately 160 acres). Each quarter can be quartered again to describe 40-acre parcels. For example, the SE/4 of the NW/4 would be the 40-acre parcel NW of the section center (read small parcel to large parcel).
- **Toxic Material.** Any material that may constitute a hazard to life or health, either temporary or permanent, from exposure by contact, inhalation, or ingestion.
- **Township.** Townships are numbered north and south of the principal base line. The first three digits are the township number, and the fourth digit indicates a full or partial township (0 = full, 1 = 1/4, 2 = 1/2, and 3 = 3/4). The fifth character (N or S) indicates direction from the baseline.
- **Urban–Wildland Interface Area.** The geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.
- **Urban–Wildland Interface Fire.** Any fire, other than prescribed fire, where fire suppression tactics were influenced by a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels (Incident Type 632).
- **Vacant.** No furnishings or equipment are present.

Wildland Fire. Any fire involving vegetative fuels, other than prescribed fire, that occurs in the wildland. A wildland fire may expose and possibly consume structures (Incident Type 141).

Wildland. Land in an uncultivated, more or less natural state and covered by timber, woodland, brush, or grass. An area in which development is essentially nonexistent except for roads, railroads, power lines, and similar facilities.

Abbreviations for States and Provinces

The following State and province abbreviations are consistent with the Federal Information Processing Standard (FIPS).

U.S. States

AK	Alaska	02	MT	Montana	30
AL	Alabama	01	NC	North Carolina	37
AR	Arkansas	05	ND	North Dakota	38
AZ	Arizona	04	NE	Nebraska	31
CA	California	06	NH	New Hampshire	33
CO	Colorado	08	NJ	New Jersey	34
CT	Connecticut	09	NM	New Mexico	35
DC	District of Columbia	11	NV	Nevada	32
DE	Delaware	10	NY	New York	36
FL	Florida	12	OH	Ohio	39
GA	Georgia	13	OK	Oklahoma	40
HI	Hawaii	15	OR	Oregon	41
IA	Iowa	19	PA	Pennsylvania	42
ID	Idaho	16	RI	Rhode Island	44
IL	Illinois	17	SC	South Carolina	45
IN	Indiana	18	SD	South Dakota	46
KS	Kansas	20	TN	Tennessee	47
KY	Kentucky	21	TX	Texas	48
LA	Louisiana	22	UT	Utah	49
MA	Massachusetts	25	VA	Virginia	51
MD	Maryland	24	VT	Vermont	50
ME	Maine	23	WA	Washington	52
MI	Michigan	26	WI	Wisconsin	55
MN	Minnesota	27	WV	West Virginia	54
MO	Missouri	29	WY	Wyoming	56
MS	Mississippi	28			

U.S. Territories and Possessions

AS	American Samoa	60	PR	Puerto Rico	72
CZ	Canal Zone	67	PW	Palau	70
DD	Department of Defense		UM	U.S. Minor Outlying	
FM	Federated States of			Islands	74
	Micronesia	64	VI	Virgin Islands	78
GU	Guam	66	OO	Other	00
MH	Marshall Islands	68			
MP	Northern Mariana				
	Islands	69			

Abbreviations for Street Types

The following street type abbreviations are from the US Postal Service

ALY	Alley	FLD	Field	LNDG	Landing
ANX	Annex	FLDS	Fields	LOOP	Loop
ARC	Arcade	FLS	Falls	MALL	Mall
AVE	Avenue	FLT	Flat	MDW	Meadow
BCH	Beach	FLTS	Flats	MDWS	Meadows
BG	Burg	FRD	Ford	MEWS	Mews
BGS	Burgs	FRDS	Fords	ML	Mill
BLF	Bluff	FRG	Forge	MLS	Mills
BLFS	Bluffs	FRGS	Forges	MNR	Manor
BLVD	Boulevard	FRK	Fork	MNRS	Manors
BND	Bend	FRKS	Forks	MSN	Mission
BR	Branch	FRST	Forest	MT	Mount
BRG	Bridge	FRY	Ferry	MTN	Mountain
BRK	Brook	FT	Fort	MTNS	Mountains
BRKS	Brooks	FWY	Freeway	MTWY	Motorway
BTM	Bottom	GDN	Garden	NCK	Neck
BYP	Bypass	GDNS	Gardens	ORCH	Orchard
CIR	Circle	GLN	Glen	OVAL	Oval
CIRS	Circles	GLNS	Glens	PARK	Park
CLF	Cliff	GRN	Green	PASS	Pass
CLFS	Cliffs	GRNS	Greens	PATH	Path
CLIS	Club	GRV	Grove	PIKE	Pike
CMN	Common	GRVS	Groves	PKY	
CMNS		GTWY		PKYS	Parkway
COR	Commons	HBR	Gateway Harbor	PL PL	Parkways Place
CORS	Corner	HBRS		PLZ	Plaza
	Corners		Harbors		
CP	Camp	HL	Hill	PNE	Pine
CPE	Cape	HLS	Hills	PNES	Pines
CRES	Crescent	HOLW	Hollow	PR	Prairie
CRK	Creek	HTS	Heights	PRT	Port
CRST	Crest	HWY	Highway	PRTS	Ports
CSWY	Causeway	HVN	Haven	PSGE	Passage
CT	Court	INLT	Inlet	PT	Point
CTR	Center	IS	Island	PTS	Points
CTRS	Centers	ISLE	Isle	RADL	Radial
CTS	Courts	ISS	Islands	RAMP	Ramp
CURV	Curve	JCT	Junction	RD	Road
CV	Cove	JCTS	Junctions	RDG	Ridge
CVS	Coves	KNL	Knoll	RDGS	Ridges
CYN	Canyon	KNLS	Knolls	RDS	Roads
DL	Dale	KY	Key	RIV	River
DM	Dam	KYS	Keys	RNCH	Ranch
DR	Drive	LCK	Lock	ROW	Row
DRS	Drives	LCKS	Locks	RPD	Rapid
DV	Divide	LDG	Lodge	RPDS	Rapids
EST	Estate	LF	Loaf	RST	Rest
ESTS	Estates	LGT	Light	RT	Route
EXPY	Expressway	LGTS	Lights	RUE	Rue
EXT	Extension	LK	Lake	RUN	Run
EXTS	Extensions	LKS	Lakes	SHL	Shoal
FALL	Fall	LN	Lane	SHLS	Shoals

SHR	Shore	TER	Terrace	VLG	Village
SHRS	Shores	TPKE	Turnpike	VLGS	Villages
SKWY	Skyway	TRAK	Track	VLY	Valley
SMT	Summit	TRCE	Trace	VLYS	Valleys
SPG	Spring	TRFY	Trafficway	VW	View
SPGS	Springs	TRL	Trail	VWS	Views
SPRS	Spurs	TRLR	Trailer	WALK	Walk
SPUR	Spur	TRWY	Throughway	WALK	Walks
SQ	Square	TUNL	Tunnel	WALL	Wall
SQS	Squares	UN	Union	WAY	Way
ST	Street	UNS	Unions	WL	Well
STA	Station	UPAS	Underpass	WLS	Wells
STRA	Stravenue	VIA	Viaduct	XING	Crossing
STRM	Stream	VIS	Vista	XRD	Crossroad
STS	Streets	VL	Ville		

Principal Meridians

This table defines the code, meridian name, abbreviation, and States included for the principal meridians in the United States. The Land Ordinance of 1785 established the Public Land Survey System (PLSS). The survey covers 30 States. The Bureau of Land Management and U.S. Department of Interior defined these codes.

Abbreviation	Meridian Name	Code	States
1	First Principal	01	IN, OH
2	Second Principal	02	IL, IN
3	Third Principal	03	IL
4	Fourth Principal	04	IL, MN, WI
5	Fifth Principal	05	AR, MN, MO, ND, SD
6	Sixth Principal	06	CO, KS, NE, SD, WY
ВН	Black Hills	07	SD
В0	Boise	08	ID
СНІ	Chickasaw	09	MS
СНО	Choctaw	10	MS
CIM	Cimarron	11	OK
CR	Copper River	12	AK
FB	Fairbanks	13	AK
GSR	Gila and Salt River	14	AZ
HUM	Humboldt	15	CA
HUN	Huntsville	16	AL
IN	Indian	17	OK
LOU	Louisiana	18	LA
MI	Michigan	19	MI, OH
MT	Principal	20	MT
MD	Mt. Diablo	21	CA, NV

Abbreviation	Meridian Name	Code	States
NAV	Navajo	22	AZ
NM	New Mexico	23	CO, NM
SH	St. Helena	24	LA
SS	St. Stephens	25	AL, MS
SL	Salt Lake	26	UT
SB	San Bernardino	27	CA
SEW	Seward	28	AK
TAL	Tallahassee	29	AL
UIN	Uintah	30	UT
UTE	Ute	31	CO
WA	Washington	32	MS
WIL	Willamette	33	OR, WA
WR	Wind River	34	WY
OHI	Ohio	35	ОН
GMR	Great Miami River	36	ОН
MUS	Muskingum River	37	ОН
OR	Ohio River	38	OH
SC1	First Scioto River	39	ОН
SC2	Second Scioto River	40	OH
SC3	Third Scioto River	41	OH
ELL	Ellicotts Line	42	OH
12M	12 Mile Square	43	OH
KR	Kateel River	44	AK
UMI	Umiat	45	AK

Abbreviations Used in Manual

ADD	attention deficit disorder	ICC	Interstate Commerce Commission
ADHD	attention deficit hyperactive disorder	LCD	liquid crystal display
AED	automatic external defibrillator	LOC	level of consciousness
AES	automatic extinguishing system	LP	liquid propane
ALS	advanced life support	LPG	liquefied petroleum gas
ARFF	Aircraft Rescue and Firefighting	MRI	magnetic resonance imaging
ATF	Alcohol, Tobacco, and Firearms	MSDS	Material Safety Data Sheets
ATM	automatic teller machine	NAERG	North American Emergency Response
ATV	all-terrain vehicle		Guidebook
BATF	Bureau of Alcohol, Tobacco, and	NFDC	National Fire Data Center
	Firearms	NFDRS	National Fire Danger Rating System
BLS	basic life support	NFIRS	National Fire Incident Reporting
CAS	Chemical Abstract Service		System
CAT	computerized axial tomography	NIBRS	National Incident-Based Reporting
CGI	combustible gas indicators		System
CPR	cardio-pulmonary resuscitation	NIFC	National Interagency Fire Center
CRG	NFIRS 5.0 Complete Reference Guide	OB	obstetrics
CVA	cerebrovascular accident	OD	overdose
DOT	Department of Transportation	OMB	Office of Management and Budget
ECF	emergency care facility	ORI	Originating Agency Identifier
EGTA	esophageal gastric tube airway	PASS	Personal Alert Safety System
EKG	electrocardiogram	PLSS	Public Land Survey System
EMS	emergency medical service	psi	pounds per square inch
EMT	emergency medical technician	RIBC	rigid intermediate bulk container
ET	endotracheal tube	SCBA	self-contained breathing apparatus
FBI	Federal Bureau of Investigation	SCUBA	self-contained underwater breathing
FD	fire department		apparatus
FDID	fire department identification	TIA	transient ischemic attack
FIBC	flexible intermediate bulk containers	UCR	Uniform Crime Reporting
FID	Federal identifier	UPS	uninterrupted power supply
FIPS	Federal Information Processing	USFA	United States Fire Administration
	Standard	V-Fib	ventricular fibrillation
GFI	ground fault interrupter	V-Tach	ventricular tachycardia
HazMat	hazardous material	VIN	vehicle identification number
HVAC	heating, ventilation, and air		
	conditioning		

Appendix D

IDENTIFICATION OF CHEMICALS AND HAZARDOUS MATERIALS

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
1-(Chloromethyl)-4-nitrobenzene	0702000			1,2-Propylenediamine	1537000	2258	
1-(2-Tolyl) thiourea	0292001		614-78-8	1,3-Butadiene	0059004	1010	106-99-0
1,1,1-Trichloroethane	0389000	2831	71-55-6	1,3-CPD	0137002	2048	77-73-6
1,1,2,2-Tetrachloroethane	0374005	1702	79-34-5	1,3-Cyclopentadiene dimer	0137003	2048	77-73-6
1,1,2-Trichloro-1,2,2-				1,3-D	0135001	2047	542-75-6
trifluoroethane	1715000			1,3-Dichloro-2-propanone	0127002	2649	534-07-6
1,1-DCE	1834000			1,3-Dichloroacetone	0127000	2649	534-07-6
1,1-Di-(tert-butylperoxy)				1,3-Dichloropropene	0135002	2047	542-75-6
cyclohexane	0859000	2179		1,3-Dimethylbenzene	0412002	1307	
1,1-Dichloroethane	0130000	2362	75-34-3	1,3-Dinitrobenzene	0166002	1597	
1,1-Dichloroethylene	0408002	1303	75-35-4	1,3-Pentadiene	0319000		504-60-9
1,1-Diethoxyethane	0001003	1088	105-57-7	1,4- Butenediol	0607000		
1,1-Difluoroethane	0147001	1030	75-37-6	1,4-Benzoguinone	0041001	2587	106-51-4
1,1-Difluoroethylene	0908000	1959		1,4-Butynediol	0072000	2716	110-65-6
1,1-Dimethylethane	0238001	1969	75-28-5	1,4-Cyclohexadiene dioxide	0041003	2587	106-51-4
1,1-Dimethylethyl hydroperoxide	0068002		75-91-2	1,4-Dichloro-2-butene	1839003		
1,1-Dimethylethylamine	0065003	2734	75-64-9	1,4-Dichlorobenzene	0128001	1592	106-46-7
1,1-Dimethylhydrazine	0159000	1163	57-14-7	1,4-Dichlorobutene	1839002		
1,1-0xy-bis-(2-chloroethane)	0129006	1916	111-44-4	1,4-Dicyanobutane	0015002	2205	111-69-3
1,2,3,4-Diepoxybutane	0138004		1464-53-5	1,4-Diethylenedioxide	0169001	1165	123-91-1
1,2,3,5-Tetramethyl benzene	1662000			1,4-Dihydroxy-2-butyne	0072004	2716	110-65-6
1,2,3,7,8-Pentachlorodibenzo-				1,4-Dimethylbenzene	0412003	1307	110 00 0
furans	1453000			1,4-Dinitrobenzene	0166003	1597	
1,2,3-Trichloropropane	1712000			1,4-Dioxane	0169000	1165	123-91-1
1,2,4-Trichlorobenzene	1701000	2321		1,4-Epoxybutane	0379001	2056	109-99-9
1,2-Butylene oxide	0067000	3022	106-88-7	1-Acetoxyethylene	0403003	1301	108-05-4
1,2-DCE	0131002	1150	540-59-0	1-Acetoxypropane	0347002	1276	109-60-4
1,2-Diaminoethane	0191002	1604	107-15-3	1-Amino-2,4-dinitrobenzene	0165001	1596	97-02-9
1,2-Dibromo-3-chloropropane	0853000			1-Amino-2-propanol	0243001	1330	78-96-6
1,2-Dibromoethane	0192002	1605	106-93-4	1-Aminobutane	0064001	1125	109-73-9
1,2-Dichloroethane	0193001	1184	107-06-2	1-Bromo-3-methylbutane	0595000	2341	103-13-3
1,2-Dichloroethylene	0131000	1150	540-59-0	1-Bromobutane	0056000	1126	109-65-9
1,2-Dichloropropane	0351001	1279	78-87-5			1120	109-00-9
1,2'-Dichlorotriethylamine	0180001	2734	538-07-8	1-Bromopropane 1-Butanethiol	0598000	2247	100 70 F
1,2-Diethoxyethane	0195001	1153	629-14-1		0070001	2347	109-79-5
1,2-Diethylhydrazine	0145000		1615-80-1	1-Butene oxide	0067001	3022	106-88-7
1,2-Dimethoxyethane	0150000	2252	110-71-4	1-Butyl acetate	0061002	1123	123-86-4
1,2-Dimethylbenzene	0412001	1307		1-Butylene oxide	0067002	3022	106-88-7
1,2-Dinitrobenzene	0166001	1597		1-Chloro-1-propene	0710000		
1,2-Epoxybutane	0067003	3022	106-88-7	1-Chloro-2,3-epoxypropane	0172001	2023	106-89-8
1,2-Epoxyethane	0199004	1040	75-21-8	1-Chloro-2-cyanoethane	0102001	3276	542-76-7
1,2-Epoxypropane	0353002	1280	75-56-9	1-Chloro-2-nitrobenzene	0097001	1578	100 10 1
1,2-Ethylene dichloride	0193005	1184	107-06-2	1-Chloro-4-methylbenzene	0104001	2238	106-43-4
1,2-Propanediol-1-methacrylate	0236001		27813-02-1	1-Chlorobutane	0094003	1127	109-69-3
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Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
1-Chloropropane	0708000	1278		2,2-Dimethyl octanoic acid	0938000		<u> </u>
1-Chloropropylene	0713000	1210		2,2-Dimethylbutane	0300001	1208	75-83-2
1-Decene	0816000			2,2-Dimethylpropane	0942000	2044	10 00 2
1-Fluoroethene	0407002	1860	75-02-5	2,2-Dimethylpropane-1,3-diol	0943000	2044	
1-Heptene	0220001	2278	592-76-7	2,3,7,8-Tetrachlorodibenzofurans	1649000		
1-Hexanol	1152000	2282	332-10-1	2,3,7,8-Tetrachlorodibenzo-p-	1043000		
1-Hexene	0222002	2370	592-41-6	dioxin(TCDD)	1650000	2378	
1-Isocyanobutane	0069003	2485	111-36-4	2,3-Butylene oxide	0618000	2010	
1-Methoxyethylene	0409002	1087	107-25-5	2,3-Dichloropropene	0877000	2047	
1-Methyl ethyl alcohol	0242004	1219	67-63-0	2,3-Dihydropyran	0912000	2376	
1-Methyl naphthalene	1310000	1215	01 00 0	2,4,5-TP (or Silvex)	1691000	2765	
1-Methyl pyrrolidone	1327000			2,4,5-Trichlorophenoxyacetic acid	1707000	2765	
1-Methyl-1-phenylethene	0244003	2303	98-83-9	2,4,5-Trichlorophenoxyacetic acid,	1101000	2100	
1-Methyl-2-aminoethanol	0243003	2303	78-96-6	sodium salt	1708000		
1-Methylbutadiene	0319001		504-60-9	2,4,6-Trichlorophenol	1706000	2020	
1-Methylethylamine	0245002	1221	75-31-0	2,4,6-Trichloro-s-triazine	0113001	2670	108-77-0
1-Methylhydrazine	0282002	1244	60-34-4	2,4,6-Trimethyl aniline	1737000	2010	100-77-0
1-Nitropropane	0308001	2608	108-03-2	2,4-D	0122000	2765	94-75-7
1-Octene	0313002	2000	111-66-0	2,4-Diaminotoluene	0385002	1709	95-80-7
1-Pentanol	0032005	1105	71-41-0	2,4-Dichlorophenol	0385002	1705	33-00-1
1-Pentene	1461000	1103	71-41-0	2,4-Dichlorophenoxyacetic acid	0122002	2765	94-75-7
1-Pentyl alcohol	0032006	1105	71-41-0	2,4-Dimethyl phenol	0939000	2261	34-13-1
1-Phenyl-2-thiourea	0328003	2767	103-85-5	2,4-Dinitro-1-aminobenzamine	0165002	1596	97-02-9
1-Phenylpropane	0348002	2364	103-65-1	2,4-Dinitroaniline	0165002	1596	97-02-9
1-Propanethiol	0342001	2402	107-03-1	2,4-Dinitrobenzamine	0165003	1596	97-02-9
1-Propene	0350004	1077	115-07-1	2,4-Dinitro-o-cresol	0167002	1598	534-52-1
1-Propyl acetate	0347003	1276	109-60-4	2,4-Dinitrophenol	0167002	1090	51-28-5
1-Propylene	0350005	1077	115-07-1	2,4-Dinitrotoluene	0951000	2038	31-20-3
1-Tropylene 1-Tetradecene	1653000	1077	113-07-1	2,4-DNP	0168005	2030	51-28-5
1-Tridecene	1720000			2,4-Pentadione		2310	123-54-6
1-Undecene	1761000			2.4-TDI	0320003	2078	584-84-9
1-ondecene	1701000			2,4-Toluenediamine	03850002	1709	95-80-7
0.011	0700000			2,5-Dioxahexane	0150003		110-71-4
2- Chloronaphthalene	0703000			2,6-Diethyl aniline	0889000	2232	110-71-4
2-(2,4,5-Trichlorophenoxy)				2,6-Xylidine		1711	
propanoic acid	1709000	2765			1784000 0417000	1711	
2-(2,4,5-Trichlorophenoxy)	4007			2-Acetylaminofluorene			
propanoic acid,	1835000	005-		2-Amino-2-methyl-1-propanol	0444000	2/101	1/11 /12 5
2-(2-Aminoethoxy)ethanol	0441000	3055	:	2-Aminoethanol	0174001	2491	141-43-5
2,2',2''-Trichlorotriethylamine	0399001	0055	555-77-1	2-Aminoisobutane	0065001	2734	75-64-9
2,2'-Diaminodiethylamine	0143004	2079	111-40-0	2-Aminopentane	0140001	1154	109-89-7
2,2'-Dichlorodiethyl ether	0129000	1916	111-44-4	2-Aminopropane	0245001	1221	75-31-0
2,2-Dichloroisopropyl ether	0872000	2490		2-Aminopyridine	0023001	2671	
2,2'-Dichlorotriethylamine	0880000			2-Bromobutane	0591000	2339	

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
	ID NO.		INU.		וט ועט.		-
2-Bromoethyl ethyl ether	0593000	2340		2-Hexanone	0271001	1224	591-78-6
2-Bromopentane	0596000			2-Hexene	1153000		
2-Bromopropane	0057000	2344	75-26-3	2-Hydroperoxy-2-methylpropene	0068003		75-91-2
2-Butanone	0280001	1193	78-93-3	2-Hydroxyethyl acrylate	1160000		
2-Butenal	0106001	1143	4170-30-3	2-Hydroxyisobutyronitrile	0005002	1541	75-86-5
2-Butyne-1,4-diol	0072001	2716	110-65-6	2-Hydroxypropinonitrile	0250003	3275	78-97-7
2-Butynediol	0072002	2716	110-65-6	2-Hydroxypropylamine	0243002		78-96-6
2-Chloro-1,3-butadiene	0100003	1991	126-99-8	2-Hydroxytriethylamine	0141004	2686	100-37-8
2-Chloro-1-ethanol	0189002	1135	107-07-3	2-Isopropylcyanohydrin	0005004	1541	75-86-5
2-Chloroacetaldehyde	0090001	2232	107-20-0	2-Methoxy-2-methylpropane	0270002	2398	1634-04-4
2-Chloroacrylic acid, methyl ester	0275001		80-63-7	2-Methoxyethanol	0197005	1188	109-86-4
2-Chlorobuta -1,3-diene	0100004	1991	126-99-8	2-Methyl lactonitrile	0005005	1541	75-86-5
2-Chlorobutane	0693000	1127		2-Methyl-1,3-butadiene	0241002	1218	78-79-5
2-Chloroethane sulfonyl chloride	0697000			2-Methyl-1-butene	1281000	2459	
2-Chloroethanol	0189001	1135	107-07-3	2-Methyl-1-butenone	0287003	1246	814-78-8
2-Chloroethyl chlorocarbonate	0095001	2742	627-11-2	2-Methyl-1-nitroanthraquinone	1312000		
2-Chloroethyl vinyl ether	0698000			2-Methyl-1-pentene	1317000		
2-Chlorophenylthiourea	0098000		5344-82-1	2-Methyl-2-butene	1282000	2460	
2-Chloropropane	0709000	2356		2-Methyl-2-hydroxy-3-butyne	1305000		
2-Chloropropene	0711000	2456		2-Methyl-2-pentene	1318000		
2-Chloropropionic acid	0101001	2511	598-78-7	2-Methyl-2-propenoic acid	0255003	2531	79-41-4
2-Cyano-2-propanol	0005001	1541	75-86-5	2-Methyl-4-pentanone	0285003	1245	108-10-1
2-Cyanoethyl alcohol	0190001		109-78-4	2-Methyl-5-vinyl pyridine (MVP)	1331000	3073	
2-Cyanohydrin	0190002		109-78-4	2-Methyl-6-ethyl aniline	1298000		
2-Cyanopropane	0240001	2284	78-82-0	2-Methylacrylic acid, methyl ester	0290002	1247	80-62-6
2-Cyanpropene	0264001	3079	126-98-7	2-Methylbutadiene	0241003	1218	78-79-5
2-Diethylaminoethanol	0141002	2686	100-37-8	2-Methylpropane	0238002	1969	75-28-5
2-Dimethylaminoethanol	0930000	2051		2-Methylpropene	0239001	1055	115-11-7
2-Ethoxyethanol	0196001	1171	110-80-5	2-Methylpropenenitrile	0264003	3079	126-98-7
2-Ethoxyethyl ethyl ether	0195004	1153	629-14-1	2-Nitrophenol	1399000	1663	
2-Ethyl hexanoic acid	1052000			2-Nitropropane	0308002	2608	79-46-9
2-Ethyl hexanol	1053000			2-Nitrotoluene	0310002	1664	
2-Ethyl hexylamine	1054000	2276		2-Oxetanone	0344002	1993	57-57-8
2-Ethyl toluene	1071000			2-Pentene	1462000		
2-Ethyl-3-propyl acrolein	1065000			2-Phenyloxirane	0363002		96-09-3
2-Fluoroacetic acid	0208002	2642	144-49-0	2-Phenylpropane	0246003	1918	98-82-8
2-Fluoroaniline	1096000	2941		2-Phenylpropylene	0244004	2303	98-83-9
2-Fluoroethanol	0194001		371-62-0	2-Propanol	0242005	1219	67-63-0
2-Formylfuran	0216001	1199	98-01-1	2-Propanone	0004003	1090	67-64-1
2-Furaldehyde	0216003	1199	98-01-1	2-Propen-1-amine	0018005	2334	107-11-9
2-Furfural	0216004	1199	98-01-1	2-Propenal	0010004	1092	79-06-1
2-H-1,4-oxazine	0298003	2054	110-91-8	2-Propenamine	0018004	2334	107-11-9
2-Heptanone	0267003	1110	110-43-0	2-Propenenitrile	0013004	1093	107-13-1
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2-Propenoic acid	0012007	2218	79-10-7	3-Propanolide	0344003	1993	57-57-8
2-Propenol	0017006	1098	107-18-6	3-Trifluoromethylaniline	1731000	2948	
2-Propenyl bromide	0019004	1099	106-95-6	·			
2-Propenyl chloroformate	0021002	1722	2937-50-0	4,4'-DDT	0811000	2761	
2-Propyl chloroformate	0247003	2407	108-23-6	4,4'-Diaminodiphenyl ether	0832000		
2-Propylamine	0245003	1221	75-31-0	4,4'-lsopropylidenediphenol	1186000		
2-Propynol	0343003	1986	107-19-7	4,4'-Methylene bis-			
2-Pyrrolidone	1551000			(2-chloroaniline)	1292000		
2-Thiopropane	0163004	1164	75-18-3	4,4'-Methylene bis-			
2-Thiourea	0382003		62-56-6	(2-methyaniline)	1293000		
				4,4'-Methylene dianiline	1295000		
3-(1-Methyl ethyl) phenyl methyl				4,4'-Thiodianiline	1679000		
carbamate	1299000			4,6-Dinitro-o-cyclohexyl phenol	0950000	9026	
3,3'-Dichlorobenzidine	0869000			4-Aminoazobenzene	0439000		
3,3'-Diethylthiadicarbocyanine				4-Aminobutyl diethoxymethyl			
iodide	0171002		514-73-8	silane	0440000		
3-Aminopropene	0018001	2334	107-11-9	4-Amino-N,N-dimethylaniline	0160001		99-98-9
3-Aminopropylene	0018002	2334	107-11-9	4-Aminopropiophenone	0445000		
3-Aminopyridine	0023002	2671		4-Aminopyridine	0023003	2671	
3-Bromo-1-propene	0019002	1099	106-95-6	4-Bromophenyl phenyl ether	0597000		
3-Bromopropylene	0019003	1099	106-95-6	4-Chloro-1-methylbenzene	0104002	2238	106-43-4
3-Bromopropyne	0058000	2345	106-96-7	4-Chlorophenyl phenyl ether	0705000		
3-Buten-2-one	0297001	1251	78-94-4	4-Chlorotoluene	0104003	2238	106-43-4
3-Buteno-beta-lactone	0149002	2521	674-82-8	4-Dimethyl aminoazobenzene	0929000		
3-Chloropropanenitrile	0102002	3276	542-76-7	4-Fluoroaniline	1097000	2941	
3-Chloropropene	0020003	1100	107-05-1	4-Fluorotoluene	1098000	2388	
3-Chloropropionitrile	0102000	3276	542-76-7	4-Methyl-1-pentene	0291000	2288	691-37-2
3-Chloropropyl octyl sulfoxide	0714000			4-Methyl-2-pentanol	0284004	2053	108-11-2
3-Chlorotoluene	0716000	2238		4-Methyl-2-pentene	1319000		
3-Hexene	1154000			4-Methyl-3-penten-2-one	1841004	1229	141-79-7
3-Hydroxy-1-propyne	0343002	1986	107-19-7	4-Methylene	0149004	2521	674-82-8
3-Hydroxypropionitrile	0190005		109-78-4	4-Nitroaniline	1380000	1661	
3-Methoxybutyl acetate	1267000			4-Nitrobiphenyl	1382000		
3-Methyl nitrosoaminopropionitrile	1313000			4-Nitrophenol	1401000	1663	
3-Methyl-1-butene	1283000	2561		4-Nitropyridine-1-oxide	1402000		
3-Methyl-2-butanone	0269000	2397	563-80-4	4-Nitrotoluene	0310004	1664	
3-Methyl-3-butene-2-one	0287002	1246	814-78-8	4-Pyridinamine	0023009	2671	
3-Methylbut-2-one	0269002	2397	563-80-4	4-Pyridylamine	0023010	2671	
3-MIC	0284006	2053	108-11-2	4-Thiapentanal	1674000	2785	
3-Nitrophenol	1400000	1663					
3-Nitrotoluene	0310003	1664		5-Nitroacenaphthene	1379000		
3-Nitrotoluol	0310007	1664		5-Nitro-o-anisidine	1381000		
3-Pentanone	0146005	1156	96-22-0				

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7H- Dibenzo (C,G) carbazole	0850000			Acetylene	0009000	1001	74-86-2
(-,-,				Acetylene dichloride	0131001	1150	540-59-0
A-150	0411001	1305	75-94-5	Acetylene tetrachloride	0374001	1702	79-34-5
AA	0017002	1098	107-18-6	Acetylene trichloride	0390001	1710	79-01-6
Acetal	0001000	1088	105-57-7	Acetylenogen	0076001	1402	75-20-7
Acetaldehyde	0002000	1089	75-07-0	Acetylsilicon trichloride	0022001	1724	107-37-9
Acetaldehyde cyanohydrin	0250001	3275	78-97-7	Acridine	0419000	2713	
Acetaldehyde ethylacetal	0001001	1088	105-57-7	Acroleic acid	0012001	2218	79-10-7
Acetamide	0414000	1000	100 01 1	Acrolein	0010000	1092	79-06-1
Acetene	0188001	1038	74-85-1	Acryladehyde	0010001	1092	79-06-1
Acetic acid (more than 80%)	1840001	2789	64-19-7	Acrylamide	0011000	2074	79-06-1
Acetic acid (solution in	1040001	2100	04 10 1	Acrylic acid	0012000	2218	79-10-7
water 1-80%)	1840000	2790	64-19-7	Acrylic acid, butyl ester	0062001	2348	141-32-2
Acetic acid anhydride	0003001	1715	108-24-7	Acrylic acid, chloride	0014001	9188	814-68-6
Acetic acid bromide	0007001	1716	506-96-7	Acrylic acid, ethyl ester	0176001	1917	140-88-5
Acetic acid chloride	0008001	1717	75-36-5	Acrylic acid, methyl ester	0263001	1919	96-33-3
Acetic acid, dimethylamide	0151001	1111	127-19-5	Acrylic amide	0011001	2074	79-06-1
Acetic acid, ethinyl ester	0403001	1301	108-05-4	Acrylonitrile	0013000	1093	107-13-1
Acetic acid, methyl ester	0261001	1231	79-20-9	Acryloyl chloride	0014000	9188	814-68-6
Acetic acid, n-butyl ester	0061001	1123	123-86-4	Acrylyl chloride	0014002	9188	814-68-6
Acetic acid, n-propyl ester	0347001	1276	109-60-4	Actidione	0117001		66-81-9
Acetic acid, vinyl ester	0403002	1301	108-05-4	Actidone	0117002		66-81-9
Acetic aldehyde	0002001	1089	75-07-0	Adipic acid	0420000		
Acetic anhydride	0002001	1715	108-24-7	Adipic acid dinitrile	0015001	2205	111-69-3
Acetic chloride	0003000	1717	75-36-5	Adiponitrile	0015000	2205	111-69-3
Acetic enter	0175001	1173	141-78-6	Alachlor	0421000		
Acetic ester	0175001	1173	141-78-6	Alcide	0088001	9191	10049-04-4
Acetoacetone	0320001	2310	123-54-6	Aldicarb	0016000	2757	116-06-3
Acetocyanohydrin	1819000	2310	123-34-0	Aldifen	0168003		51-28-5
Acetol	0001002	1088	105-57-7	Aldrin	0422000	2761	
Acetone	0001002	1090	67-64-1	Algrain	0177001	1170	64-17-5
Acetone cyanohydrin	0005000		67-64-1	Alkyl benzene sulfonic acids	0423000		
Acetone cyanonyumi Acetone thiosemicarbazide	0415000	1541	07-04-1	Allene	0424000	2200	
Acetonitrile	0006000	1648	75-05-8	Allene-methyl acetylene mixture	0262001	1060	
Acetophenone	0416000	1046	15-05-6	Allethrin	0425000	2902	
•	0320002	2210	123-54-6	Allyl acetate	0426000	2333	
Acetyl acetone Acetyl anhydride	0003002	2310 1715	108-24-7	Allyl alcohol	0017000	1098	107-18-6
Acetyl bromide	0003002	1715	506-96-7	Allyl aldehyde	0010002	1092	79-06-1
Acetyl bromide Acetyl chloride	0008000	1710	75-36-5	Allyl bromide	0019000	1099	106-95-6
•	0003003	1717	108-24-7	Allyl chloride	0020000	1100	107-05-1
Acetyl ether		2521	108-24- <i>1</i> 674-82-8	Allyl chlorocarbonate	0021001	1722	2937-50-0
Acetyl ketene	0149001 0003004	1715	108-24-7	Allyl chloroformate	0021000	1722	2937-50-0
Acetyl oxide			100-24-7	Allyl ether	0427000		
Acetyl peroxide solution	0418000	2084			3.27000		

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Allyl ethyl ether	0428000	2335		Amiton oxalate	0447000		
Allyl iodide	0429000	1723		Amitrole	0448000		
Allyl isothiocyanate	0430000	1545		Ammonia	0024000	1005	7664-41-7
Allylal	0017001	1098	107-18-6	Ammonia monohydrate	0027001		1336-21-6
Allylamine	0018000	2334	107-11-9	Ammonia solution	0027002		1336-21-6
Allylic alcohol	0017003	1098	107-18-6	Ammonia water	0027003		1336-21-6
Allyltrichlorosilane	0022000	1724	107-37-9	Ammonia, anhydrous	0024002	1005	7664-41-7
alpha-Bromotoluene	0044001	1737	100-39-0	Ammonium acetate	0449000		
alpha-Chlorobenzaldehyde	0043002	1736	98-88-4	Ammonium aminoformate	0026001	9083	1111-78-0
alpha-Chloropropionic acid	0101000	2511	598-78-7	Ammonium benzoate	0025000	9080	1863-63-4
alpha-Chlorotoluene	0045001	1738	100-44-7	Ammonium bicarbonate	0452000		
alpha-Cumene hydroperoxide	0107001	2116	80-15-9	Ammonium bifluoride	0453000	1727	
alpha-Endosulfan	0992000			Ammonium bisulfite	0454000	2693	
alpha-Methacrylic acid	0255002	2531	79-41-4	Ammonium bromide	0455000		
alpha-Methyalcrylic acid	0255001	2531	79-41-4	Ammonium carbamate	0026000	9083	1111-78-0
alpha-Methyl benzyl alcohol	1280000	2937		Ammonium carbonate	0456000	9084	
alpha-Methyl styrene	0244002	2303	98-83-9	Ammonium chloride	0457000	9085	
alpha-Naphthyl amine	1355000	2077		Ammonium chromate	0458000	9086	
alpha-Pinene	0337000	2368	80-56-8	Ammonium citrate	0459000	9087	
alpha-Tolunitrile	0324001	2470	140-29-4	Ammonium dichromate	0460000	1439	
Aluminum (dust)	0431000	1396		Ammonium fluoborate	0461000	9088	
Aluminum borohydride	0432000	2870		Ammonium fluoride	0462000	2505	
Aluminum chloride	0433000	1726		Ammonium formate	0463000		
Aluminum fluoride	0434000			Ammonium gluconate	0464000		
Aluminum nitrate	0435000	1438		Ammonium hydroxide	0027000	2672	1336-21-6
Aluminum oxide	0436000			Ammonium hydroxide			
Aluminum phosphide	0437000	1397		(10-35% in water)	0027004	2672	1336-21-6
Aluminum sulfate	0438000			Ammonium hydroxide			
Aluminum, triisobutyl	0395001		100-99-2	(35-50% in water)	0027005	2073	1336-21-6
AMF0	0034001	0331		Ammonium hypophosphite	0465000		
AM-FOL	0024001	1005	7664-41-7	Ammonium iodide	0466000		
Aminic acid	0214001	1779	64-18-6	Ammonium lactate	0467000		
Aminobenzene	0035002	1547	62-53-3	Ammonium lauryl sulfate	0468000		
Aminocyclohexane	0118001	2357	108-91-8	Ammonium molybdate	0469000		
Aminoethane	0178001	1036	75-04-7	Ammonium monosulfide	0029001	2683	12135-76-1
Aminoethyl ethanol amine	0442000			Ammonium nitrate	0470000	1942	
Aminoethylethandiamine	0143001	2079	111-40-0	Ammonium nitrate fertilizers	0471000	2072	
Aminohexahydrobenzene	0118002	2357	108-91-8	Ammonium nitrate:fuel oil	0034002	0331	
Aminomethane	1831000			Ammonium nitrate-phosphate			
Aminophen	0035001	1547	62-53-3	mixture	0472000		
Aminopyridine	0023000	2671		Ammonium nitrate-sulfate mixture	0473000	2069	
Aminotoluene	0387001	1708		Ammonium nitrate-urea solution	0474000		
Amiton	0446000	3017		Ammonium oleate	0475000		

Observiced Names	Chemical	UN	CAS	Ohaani'a al Nama	Chemical	UN	CAS
Chemical Name	ID No.	No.	No.	Chemical Name	ID No.	No.	No.
Ammonium oxalate	0476000	2449		Antimony pentafluoride	0503000	1732	
Ammonium pentaborate	0477000			Antimony potassium tartrate	0504000	1551	
Ammonium perchlorate	0028000	1442	7790-98-9	Antimony tribromide	0505000	1549	
Ammonium perchlorate high				Antimony trichloride	0506000	1733	
explosive	0028001	1442	7790-98-9	Antimony trifluoride	0507000	1549	
Ammonium perchlorate oxidizer	0028002	1442	7790-98-9	Antimony trioxide	0508000		
Ammonium permanganate	0478000	9190		Antimony (powder)	0501000	2871	
Ammonium persulfate	0479000	1444		ANTU	0509000	1651	
Ammonium phosphate	0480000			Aqua fortis	0302002		7697-37-2
Ammonium picrate (wet)	0481000	1310		Aqueous ammonia	0027006		1336-21-6
Ammonium rhodanate	0031000	9092	1762-95-4	Aramite	0510000		
Ammonium silicofluoride	0482000	2854		Arctic	0273001	1063	74-87-3
Ammonium stearate	0483000			Argon	0511000	1006	
Ammonium sulfamate	0484000	9089		Arsenic	0512000	1558	
Ammonium sulfate	0485000			Arsenic acid	0513000	1561	
Ammonium sulfide	0029000	2683	12135-76-1	Arsenic butter	0036001	1560	7784-34-1
Ammonium sulfite	0030000	9090	10196-04-0	Arsenic chloride	0036002	1560	7784-34-1
Ammonium sulfocyanide	0031001	9092	1762-95-4	Arsenic dichloroethane	0186001	1892	598-14-1
Ammonium tartrate	0486000	9091		Arsenic disulfide	0514000	1557	
Ammonium thiocyanate	0031002	9092	1762-95-4	Arsenic hydride	0037001	2188	7784-42-1
Ammonium thiosulfate	0487000	9093		Arsenic pentoxide	0515000	1559	
AMS	0244001	2303	98-83-9	Arsenic trichloride	0036000	1560	7784-34-1
Amthio	0031003	9092	1762-95-4	Arsenic trihydride	0037002	2188	7784-42-1
Amyl alcohol	0032000	1105	71-41-0	Arsenic trioxide	0516000	1561	
Amyl methyl ketone	0267001	1110	110-43-0	Arsenic trisulfide	0517000	1557	
Amyl phthalate	0494000			Arsenous chloride	0036003	1560	7784-34-1
Amylol	0032002	1105	71-41-0	Arsenous trichloride	0036004	1560	7784-34-1
Amyltrichlorosilane	0033000	1728	107-72-2	Arsine	0037000	2188	7784-42-1
AN/FO	0034000	0331		Asbestos	0518000	2212	
Anhydrol	0177002	1170	64-17-5	Asphalt	0519000	1999	
Anhydrous ammonia	0024003	1005	7664-41-7	Asphalt blending stocks:			
Anhydrous ethanol	0177003	1170	64-17-5	roofers flux	0520000	1999	
Anhydrous hydrobromic acid	0228001	1048	10035-10-6	Asphalt blending stocks:			
Anhydrous hydrofluoric acid	0231001	1052	7664-39-3	straight run residue	0521000	1999	
Aniline	0035000	1547	62-53-3	asym-Dimethylhydrazine	0159001	1163	57-14-7
Aniline oil	0035003	1547	62-53-3	Atrazine	0522000		
Anisole	0498000	2222	-	Auramine	0523000		
Anisoyl chloride	0499000	1729		Avitrol	0023007	2671	
Anone	0116001	1915	108-94-1	Azabenzene	0354001	1282	110-86-1
Ansul ether 121	0150001	2252	110-71-4	Azacyclohexane	0338001		110-89-4
Anthion	0340001	1492	7727-21-1	Azacyclopropane	0198001	1185	151-56-4
Anthracene	0500000	1102		Azide	0357001	1687	26628-22-8
Antimony pentachloride	0502000	1730		Azine			110-86-1
Antimony pentacinonae	0302000	1130		ALIIG	0334002	1202	110-00-1

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Azirane	0198002	1185	151-56-4	Benzoic acid	0549000		
Aziridine	0198003	1185	151-56-4	Benzoic acid amide	0038001		
				Benzoic aldehyde	1838004		100-52-7
Barium	0524000	1400		Benzoic trichloride	0042001	2226	98-07-7
Barium carbonate	0525000	1564		Benzol	0039001	1114	71-43-2
Barium chlorate	0533000	1445		Benzonitrile	0040000	2224	100-47-0
Barium cyanide	0534000	1565		Benzophenone	0550000		
Barium nitrate	0535000	1446		Benzoquinone	0041000	2587	106-51-4
Barium perchlorate	0536000	1447		Benzotrichloride	0042000	2226	98-07-7
Barium permanganate	0537000	1448		Benzoyl chloride	0043000	1736	98-88-4
Barium peroxide	0538000	1449		Benzoyl peroxide	0551000	2085	
BCME	0133001	2249	542-88-1	Benzoylamide	0038002		
BD	0059001	1010	106-99-0	Benzyl acetate	0552000		
Benomyl	0539000			Benzyl alcohol	0553000		
Bentazon	0540000			Benzyl amine	0554000		
Benzal chloride	0047001	1886	98-87-3	Benzyl bromide	0044000	1737	100-39-0
Benzaldehyde	1838000	1989	100-52-7	Benzyl carbonyl chloride	0046001	1739	501-53-1
Benzaldehyde	1838001	1990	100-52-7	Benzyl chloride	0045000	1738	100-44-7
Benzamide	0038000			Benzyl chlorocarbonate	0046002	1739	501-53-1
Benzenamine	0035004	1547	62-53-3	Benzyl chloroformate	0046000	1739	501-53-1
Benzene	0039000	1114	71-43-2	Benzyl cyanide	0324003	2470	140-29-4
Benzene arsonic acid	0541000			Benzyl dichloride	0047002	1886	98-87-3
Benzene chloride	0093001	1134	108-90-7	Benzyl dimethyl amine	0555000	2619	
(Chloromethyl) benzene	0045002	1738	100-44-7	Benzyl dimethyl octadecyl			
Benzene fluoride	0209001	2387	462-06-6	ammonium chloride	0556000		
Benzene hexachloride	0542000	2729		Benzyl ether	0124001		103-50-4
Benzene methylal	1838003		100-52-7	Benzyl iodide	0557000	2653	
Benzene nitro	1842001	1662	98-95-3	Benzyl nitrile	0324004	2470	140-29-4
Benzene phosphorous dichloride	0327001	2798	644-97-3	Benzyl oxide	0124002		103-50-4
Benzene sulfonyl chloride	0543000	2225		Benzyl trichloride	0042003	2226	98-07-7
Benzeneacetonitrile	0324002	2470	140-29-4	Benzyl trimethyl ammonium			
Benzenecarbonal	1838002		100-52-7	chloride	0558000		
Benzenecarbonyl chloride	0043001	1736	98-88-4	Benzyl violet	0559000		
Benzenehexahydride	0115001	1145	108-94-1	Benzylene chloride	0047003	1886	98-87-3
Benzenenitrile	0040001	2224	100-47-0	Benzylidene chloride	0047000	1886	98-87-3
Benzenethiol	0326001	2337	108-98-5	Beryllium	0560000	1567	
Benzenol	0323003		108-95-2	Beryllium chloride	0561000	1566	
Benzidine	0544000	1885		Beryllium fluoride	0562000	1566	
Benzin	0299001		8030-30-6	Beryllium nitrate	0563000	2464	
Benzo (A) anthracene	0545000			Beryllium oxide	0564000	1566	
Benzo (A) pyrene	0546000			Beryllium sulfate	0565000	1566	
Benzo (B) fluoranthene	0547000			beta-Butyrolactone	0606000		
Benzo (GHI) perylene	0548000			beta-Chloroprene	0100001	1991	126-99-8

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
beta-Endosulfan	0993000			Boroethane	0125001	1911	19287-45-7
beta-Methyl acrolein	0106006	1143	4170-30-3	Boron bromide	0048001	2692	10294-33-4
beta-Propiolactone	0344004	1993	57-57-8	Boron chloride	0048001	1741	10294-33-4
ВНА	0566000	1000	0. 0. 0	Boron fluoride	0050001	1008	7637-07-2
BHC, alpha-	0567000			Boron hydride	1820000	1000	1001 01 2
BHC, beta-	0568000			Boron tribromide	0048000	2692	10294-33-4
BHC, delta-	0569000			Boron trichloride	0049000	1741	10294-34-5
BHC, gamma-	0570000			Boron trifluoride	0050000	1008	7637-07-2
BIC	0069001	2485	111-36-4	Boron trifluoride; dimethyl	000000		
Bicylcopentadiene	0137001	2048	77-73-6	etherate	0585000	2965	
Biethylene	0059002	1010	106-99-0	Bottled gas	0252001	1075	68476-85-7
Bimethyl	0173002		74-84-0	BPL	0344001	1993	57-57-8
Biocide	0010003	1092	79-06-1	Brimstone	0365002	1350	7704-34-9
Biogas	0257002		74-82-8	Brom	0051001	1744	7726-95-6
Bioxirane	0138001		1464-53-5	Bromacil	0586000	2	
Biphenyl	0571000			Bromadiolone	0587000		
Bis-(2-aminoethyl) amine	0143002	2079	111-40-0	Bromide fluoride	0052001	1745	7789-30-2
Bis-(2-chloro-1-methyl ethyl) ether	0574000	2490		Bromine	0051000	1744	7726-95-6
Bis-(2-chloroethoxy) methane	0572000			Bromine chloride	0588000	2901	
Bis-(2-chloroethyl) ether	0129001	1916	111-44-4	Bromine cyanide	0110000	1889	506-68-3
Bis-(2-chloroisopropyl) ether	0573000	2490		Bromine fluoride	0053001	1746	7787-71-5
Bis-(2-ethyl hexyl) adipate	0575000			Bromine pentafluoride	0052000	1745	7789-30-2
Bis-(2-ethyl hexyl) phthalate	0576000			Bromine trifluoride	0053000	1746	7787-71-5
Bis-(chloromethyl) ether	0133002	2249	542-88-1	Bromoacetic acid	0589000	1938	
Bis-(chloromethyl) ketone	0127001	2649	534-07-6	Bromoacetone	0590000	1569	
Bismuth oxychloride	0577000			Bromoacetyl bromide	0054000	2513	598-21-0
Bis-0,0-diethylpyrophosphoric				Bromoallylene	0019001	1099	106-95-6
anhydride	0377002		107-49-3	Bromobenzene	0055000	2514	108-86-1
Bisphenol A	0578000			Bromochloromethane	0592000	1887	
Bisphenol A diglycidyl ether	0579000			Bromocyan	0110001	1889	506-68-3
Bisulfite	0367001	1079	7446-09-5	Bromoethanoyl bromide	0054001	2513	598-21-0
Bithionol	0580000			Bromoethene	0404001	1085	593-60-2
Bitoscanate	0581000			Bromoethylene	0404002	1085	593-60-2
Bivinyl	0059003	1010	106-99-0	Bromoform	0594000	2515	
B-K Liquid	0360001	1791	7681-52-9	Bromofume	0192001	1605	106-93-4
Blasting oil	0306002	0143	55-63-0	Brom-o-gas	0268001	1062	74-83-9
Bleach	0360002	1791	7681-52-9	Bromomethane	0268002	1062	74-83-9
Blue oil	0035005	1547	62-53-3	Bromophenylmethane	0044002	1737	100-39-0
Bolero	0582000			Bromopropyne	0058001	2345	106-96-7
Bondolane A	0364001		126-33-0	Bromotrifluoroethylene	0599000	2419	
Bonoform	0374002	1702	79-34-5	Bromotrifluoromethane	0600000	1009	
Boric acid	0583000			Brucine	0601000	1570	
Borneol	0584000	1312		Butadiene	0059000	1010	106-99-0

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Butadiene diepoxide	0138002		1464-53-5	Butyric acid chloride	0075002	2353	141-75-3
Butadiene dioxide	0138003		1464-53-5	Butyric acid nitrile	0074002	2411	109-74-0
Butal	0073001	1129	123-72-8	Butyric acid, ethyl ester	0182001	1180	105-54-4
Butaldehyde	0073000	1129	123-72-8	Butyric acid, methyl ester	0272001	1237	623-42-7
Butanal	0073003	1129	123-72-8	Butyric chloride	0075003	2353	141-75-3
Butane	0060000	1011	106-97-8	Butyronitrile	0074000	2411	109-74-0
Butane nitrile	0074001	2411	109-74-0	Butyryl chloride	0075000	2353	141-75-3
Butanedione	0602000	2346		BZCF	0046003	1739	501-53-1
Butanethiol	0070002	2347	109-79-5				
Butanoyl chloride	0075001	2353	141-75-3	C.I. acid blue 9, diammonium salt	0734000		
Butene	0066001	1012	25167-67-3	C.I. acid blue 9, disodium salt	0735000		
Butyl acetic acid	0077001	2829	142-62-1	C.I. acid green 3	0736000		
Butyl acid phosphate	0608000	1718		C.I. basic green 4	0737000		
Butyl acrylate	0062000	2348	141-32-2	C.I. basic red 1	0738000		
Butyl alcohol	0063002	1120	75-65-0	C.I. disperse yellow 3	0739000		
Butyl aldehyde	0073004	1129	123-72-8	C.I. food red 15	0741000		
Butyl benzyl phthalate	0614000			C.I. food red 5	0740000		
Butyl bromide	0056001	1126	109-65-9	C.I. solvent orange 7	0742000		
Butyl butyrate	0615000			C.I. solvent yellow 14	0744000		
Butyl chloride	0094001	1127	109-69-3	C.I. solvent yellow 3	0743000		
Butyl ethanoate	0061003	1123	123-86-4	C.I. vat yellow 4	0747000		
Butyl ether	0619000	1149		Cacodylic acid	0633000	1572	
Butyl ethylene	0222001	2370	592-41-6	Cadmium acetate	0635000		
Butyl isocyanate	0069002	2485	111-36-4	Cadmium bromide	0636000		
Butyl isovalerate	0621000			Cadmium chloride	0637000		
Butyl mercaptan	0070000	2347	109-79-5	Cadmium fluoroborate	0638000		
Butyl methyl ether	0623000	2350		Cadmium nitrate	0639000		
Butyl nitrite	0624000	2351		Cadmium oxide	0640000		
Butyl toluene	0629000	2667		Cadmium stearate	0641000		
Butyl, decyl, cetyl-eicosyl				Cadmium sulfate	0642000		
methacrylate	0617000			Cadmium (powder)	0634000		
Butyl-2-propenoate	0062003	2348	141-32-2	CADOXTBH	0068001		75-91-2
Butylacetone	0267002	1110	110-43-0	Calcium	0643000	1401	
Butylamine	0064002	1125	109-73-9	Calcium acetylide	0076002		75-20-7
Butylated hydroxyanisole	0613000			Calcium arsenite	0644000	1574	
Butylene	0066000	1012	25167-67-3	Calcium carbide	0076000		75-20-7
Butylethylamine	0181001	2734	13360-63-9	Calcium chlorate	0645000	1452	
Butylsilicon trichloride	0071001	1747	7521-80-4	Calcium chloride	0646000		
Butyltrichlorosilane	0071000	1747	7521-80-4	Calcium chromate	0657000	9096	
Butynediol	0072003	2716	110-65-6	Calcium cyanide	0658000	1575	
Butyral	0073005	1129	123-72-8	Calcium fluoride	0659000		
Butyraldehyde	0073002	1129	123-72-8	Calcium hydride	0660000	1404	
Butyric acid	0630000			Calcium hydroxide	0661000		

00 174: 00 145: 00 191: 00 145: 00 136: 00 901: 00 282: 00 282: 01 159:	4 0 7 0 1 0 9 142-62-1	Carbon oxychloride Carbon oxyfluoride Carbon oxysulfide Carbon sulfide Carbon tet Carbon tetrachloride Carbona Carbonic acid anhydride Carbonic acid, diethyl ester Carbonic anhydride Carbonic difluoride	0329002 0084003 0085002 0081003 0083003 0083000 0083001 0080001 0080002 0142001 0080003	1076 2414 2204 1131 1846 1846 1013 1013 2366	75-44-5 353-50-4 463-58-1 75-15-0 56-23-5 56-23-5 124-38-9 124-38-9 105-58-8
000 1910 000 145 000 136 000 901 000 911 000 282 000 002 282 011 159	0 7 0 1 0 9 142-62-1	Carbon oxyfluoride Carbon oxysulfide Carbon sulfide Carbon tet Carbon tetrachloride Carbona Carbonic acid anhydride Carbonic acid gas Carbonic acid, diethyl ester Carbonic anhydride	0085002 0081003 0083003 0083000 0083001 0080001 0080002 0142001	2414 2204 1131 1846 1846 1013 1013 2366	463-58-1 75-15-0 56-23-5 56-23-5 56-23-5 124-38-9 124-38-9
00 145 00 136 00 901 00 911 00 282 00 282 01 159	7 0 1 0 9 142-62-1	Carbon sulfide Carbon tet Carbon tetrachloride Carbona Carbonic acid anhydride Carbonic acid gas Carbonic acid, diethyl ester Carbonic anhydride	0081003 0083003 0083000 0083001 0080001 0080002 0142001	1131 1846 1846 1846 1013 1013 2366	75-15-0 56-23-5 56-23-5 56-23-5 124-38-9 124-38-9
000 1366 000 901 000 901 000 113 000 282 000 02 282 01 159	0 1 0 9 142-62-1	Carbon sulfide Carbon tet Carbon tetrachloride Carbona Carbonic acid anhydride Carbonic acid gas Carbonic acid, diethyl ester Carbonic anhydride	0083003 0083000 0083001 0080001 0080002 0142001	1846 1846 1846 1013 1013 2366	56-23-5 56-23-5 56-23-5 124-38-9 124-38-9
00 136 00 901 00 901 00 282 00 282 01 159	1 0 9 142-62-1	Carbon tetrachloride Carbona Carbonic acid anhydride Carbonic acid gas Carbonic acid, diethyl ester Carbonic anhydride	0083000 0083001 0080001 0080002 0142001	1846 1846 1013 1013 2366	56-23-5 56-23-5 124-38-9 124-38-9
000 901 113 00 282 00 22 282 01 159	1 0 9 142-62-1	Carbona Carbonic acid anhydride Carbonic acid gas Carbonic acid, diethyl ester Carbonic anhydride	0083001 0080001 0080002 0142001	1846 1013 1013 2366	56-23-5 124-38-9 124-38-9
00 901 00 113 00 282 00 282 01 159	9 142-62-1	Carbonic acid anhydride Carbonic acid gas Carbonic acid, diethyl ester Carbonic anhydride	0080001 0080002 0142001	1013 1013 2366	124-38-9 124-38-9
00 113 00 282 00 282 01 159	9 142-62-1	Carbonic acid gas Carbonic acid, diethyl ester Carbonic anhydride	0080002 0142001	1013 2366	124-38-9
00 282 00 282 00 282 01 159	9 142-62-1	Carbonic acid, diethyl ester Carbonic anhydride	0142001	2366	
00 282 00 282 02 282 01 159		Carbonic anhydride			105-58-8
00 02 282 01 01 159		1	0080003	4040	
)2 282)1)1 159	9 142-62-1	Carbonic diffuorida		1013	124-38-9
)1)1 159	9 142-62-1	Carbonic unitability	0084001	2414	353-50-4
01 159		Carbonic ether	0142002	2366	105-58-8
	111-66-0	Carbonic oxide	0082001	1016	630-08-0
	8 534-52-1	Carbonochloride acid, ethyl ester	0185001	1182	541-41-3
00 909	9	Carbonyl chloride	0329003	1076	75-44-5
01	51-83-2	Carbonyl fluoride	0084000	2414	353-50-4
00	51-83-2	Carbonyl sulfide	0085000	2204	463-58-1
)2	51-83-2	Carene	0676000		
03	51-83-2	Casing head gasoline	0217001	1203	8006-61-9
01 109	3 107-13-1	Caswell No.805	0361001	1692	57-24-9
02 908	3 1111-78-0	Catechol	0677000		
01 151	1 124-43-6	Caustic potash solution	0647000	1814	
)4	51-83-2	Caustic soda	0359002		1310-73-2
01 226	2 79-44-7	Caustic soda, solution	0359003		1310-73-2
)1 275	7 116-06-3	Cellon	0374003	1702	79-34-5
00 275	7	Certox	0361002	1692	57-24-9
3 140	2 75-20-7	Cesium	0678000	1407	
)1 123	0 67-56-1	CHA	0118003	2357	108-91-8
00 275	7 1563-66-2	Chloral	0086000	2075	75-87-6
)4	108-95-2	Chloramben	0679000		
00 282	1	Chlorbisan	0680000		
)1 113	1 75-15-0	Chlordane, flammable liquid	0681000	2762	
)2 113	1 75-15-0	Chlordecone	0682000		
)2 184	6 56-23-5	Chlorex	0129002	1916	111-44-4
)1 107	6 75-44-5	Chlorfenvinfos	0683000		
)2 241	4 353-50-4	Chloride of phosphorous	0335001	1809	7719-12-2
00 101	3 124-38-9	Chlorine	0087000	1017	7782-50-5
00 113	1 75-15-0	Chlorine cyanide	0111001	1589	506-78-5
00 101	6 630-08-0	Chlorine dioxide	0088002	9191	10049-04-4
)1 102	6 460-19-5	Chlorine dioxide hydrate	0088000	9191	10049-04-4
)2 101	6 630-08-0	Chlorine dioxide hydrate (frozen)	0088003	9191	10049-04-4
)1 220	4 463-58-1	Chlorine fluoride	0089001	1749	7790-91-2
	001 1230 000 275 004 000 282 001 1133 002 1133 002 1840 001 1070 002 2414 000 1013 000 1133 000 1010 001 1020	001 1230 67-56-1 000 2757 1563-66-2 004 108-95-2 000 2821 001 1131 75-15-0 002 1846 56-23-5 001 1076 75-44-5 002 2414 353-50-4 000 1013 124-38-9 000 1016 630-08-0 001 1026 460-19-5 002 1016 630-08-0 002 1016 630-08-0	001 1230 67-56-1 CHA 000 2757 1563-66-2 Chloral 004 108-95-2 Chloramben 000 2821 Chlordane, flammable liquid 001 1131 75-15-0 Chlordecone 002 1846 56-23-5 Chlorex 001 1076 75-44-5 Chloride of phosphorous 002 2414 353-50-4 Chlorine 000 1013 124-38-9 Chlorine 000 1016 630-08-0 Chlorine dioxide 001 1026 460-19-5 Chlorine dioxide hydrate 002 1016 630-08-0 Chlorine dioxide hydrate (frozen)	001 1230 67-56-1 CHA 0118003 000 2757 1563-66-2 Chloral 0086000 004 108-95-2 Chloramben 0679000 000 2821 Chlorbisan 0680000 001 1131 75-15-0 Chlordane, flammable liquid 0681000 002 1846 56-23-5 Chlorex 0129002 001 1076 75-44-5 Chlorfenvinfos 0683000 002 2414 353-50-4 Chloride of phosphorous 0335001 000 1013 124-38-9 Chlorine 0087000 000 1131 75-15-0 Chlorine cyanide 0111001 000 1016 630-08-0 Chlorine dioxide 0088002 001 1026 460-19-5 Chlorine dioxide hydrate 0088003 002 1016 630-08-0 Chlorine dioxide hydrate (frozen) 0088003	001 1230 67-56-1 CHA 0118003 2357 000 2757 1563-66-2 Chloral 0086000 2075 004 108-95-2 Chloramben 0679000 000 2821 Chlordane, flammable liquid 0680000 001 1131 75-15-0 Chlordecone 0682000 002 1846 56-23-5 Chlorex 0129002 1916 001 1076 75-44-5 Chloride of phosphorous 0335001 1809 000 1013 124-38-9 Chlorine 0087000 1017 000 1016 630-08-0 Chlorine dioxide 0088002 9191 001 1026 460-19-5 Chlorine dioxide hydrate 0088003 9191 002 1016 630-08-0 Chlorine dioxide hydrate (frozen) 0088003 9191

	Chemical	UN	CAS		Chemical	UN	CAS
Chemical Name	ID No.	No.	No.	Chemical Name	ID No.	No.	No.
Chlorine monoxide	0684000			Chloromethyl cyanide	0091002	2668	107-14-2
Chlorine pentafluoride	0685000	2548		Chloromethyl ether	0133004	2249	542-88-1
Chlorine peroxide	0088004	9191	10049-04-4	Chloromethyl ethyl ether	0700000	2354	
Chlorine sulfide	0366001	1828	10545-99-0	Chloromethyl methyl ether	0701000	1239	
Chlorine trifluoride	0089000	1749	7790-91-2	Chloromethyloxirane	0172002	2023	106-89-8
Chlormephos	0686000			Chloronitrobenzene	0097000	1578	
Chlormequat chloride	0687000			Chlorophenyl methane	0045003	1738	100-44-7
Chloro methyl sulfane	0258001	3246	124-63-0	Chloropicrin	0099000	1580	76-06-2
Chloro(chloromethoxy)methane	0133003	2249	542-88-1	Chloropicrin: methyl chloride	0706000	1582	
Chloroacetaldehyde	0090000	2232	107-20-0	Chloropivaloyl chloride	0707000	9263	
Chloroacetaldehyde monomer	0090002	2232	107-20-0	Chloroprene	0100000	1991	126-99-8
Chloroacetic acid	0688000	1751		Chloropropene	0020002	1100	107-05-1
Chloroacetic acid chloride	0092001	1752	79-04-9	Chloropropham	0712000		
Chloroacetic acid, ethyl ester	0184001	1181	105-39-5	Chloropropylene	0020004	1100	107-05-1
Chloroacetic acid, methyl ester	0274001	2295	96-34-4	Chloropropylene oxide	0172003	2023	106-89-8
Chloroacetic chloride	0092002	1752	79-04-9	Chlorosulfane	0369001	1828	10025-67-9
Chloroacetone	0689000	1695		Chlorosulfonic acid	0103000	1454	7790-94-5
Chloroacetonitrile	0091000	2668	107-14-2	Chlorosulfuric acid	0103001	1454	7790-94-5
Chloroacetophenone	0690000	1697		Chlorothalonil	0715000		
Chloroacetyl chloride	0092000	1752	79-04-9	Chlorotoluene	0104000	2238	106-43-4
Chloroaldehyde	0090003	2232	107-20-0	Chlorotrifluoride	0089002	1749	7790-91-2
Chloroallylene	0020001	1100	107-05-1	Chlorotrifluoroethane	0718000	1983	
Chlorobenzene	0093000	1134	108-90-7	Chlorotrifluoroethylene	0394001	1082	79-38-9
Chlorobenzilate	0692000			Chlorotrifluoromethane	0719000	1022	
Chlorobutadiene	0100002	1991	126-99-8	Chlorotrimethylsilane	0398001	1298	75-77-4
Chlorobutane	0094000	1127	109-69-3	Chloroxuron	0720000		
Chlorocarbonic acid, ethyl ester	0185002	1182	541-41-3	Chlorpyrifos	0105000	2783	2921-88-2
Chlorocyan	0111002	1589	506-78-5	Chlorthiophos	0721000		
Chlorocyanogen	0111003	1589	506-78-5	Chlorylen	0389001	2831	71-55-6
Chlorodibromomethane	0695000			Choline chloride carbamate	0078005		51-83-2
Chlorodifluoromethane	0696000	1018		CHP	0107002	2116	80-15-9
Chloroethanal	0090004	2232	107-20-0	Chromic acetate	0722000	9101	
Chloroethane	1825000			Chromic acid	0723000	1755	
Chloroethanenitrile	0091001	2668	107-14-2	Chromic anhydride	0724000	1463	
Chloroethanol	0189003	1135	107-07-3	Chromic sulfate	0729000	9100	
Chloroethene	0405001	1086	75-01-4	Chromium (dust)	0730000		
Chloroethyl chloroformate	0095000	2742	627-11-2	Chromium oxychloride	0731000	1758	
Chloroethylene	0405002	1086	75-01-4	Chromous chloride	0732000	9102	
Chloroform	0096000	1888	67-66-3	Chrysene	0733000		
Chloroformic acid, isopropyl ester	0247001	2407	108-23-6	Cinnamenol	0362001	2055	100-42-5
Chloroformyl chloride	0329004	1076	75-44-5	cis-Butene	0066002	1012	25167-67-3
Chlorohydrins	0699000			Citric acid	0745000		
Chloromethane	0273002	1063	74-87-3	Citrus red No.2	0746000		

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Clorox	0360003	1791	7681-52-9	Cresylate spent caustic solution	0788000		
CO	0082003	1016	630-08-0	Crimidine	0789000	2588	
Coal gas	0748000	1023	000 00 0	Croton oil	0790000		
Coal naptha	0039002	1114	71-43-2	Crotonal	0106003	1143	4170-30-3
Coal oil	0249001	1223	8008-20-6	Crotonaldehyde (E)	0106004	1143	4170-30-3
Cobalt	0749000	1220	0000 20 0	Crotonaldehyde (Stabilized)	0106000	1143	4170-30-3
Cobalt acetate	0750000			Crude oil	0791000		
Cobalt bromide	0751000			CTFE	0394002	1082	79-38-9
Cobalt carbonyl	0752000			Cumene	0246001	1918	98-82-8
Cobalt chloride	0753000			Cumene hydroperoxide	0107000	2116	80-15-9
Cobalt fluoride	0754000			Cumyl hydroperoxide	0107003	2116	80-15-9
Cobalt formate	0755000	9104		Cupferron	0792000		
Cobalt nitrate	0756000	010.		Cupriethylene diamine solution	0793000	1761	
Cobalt sulfamate	0757000			Curmol	0246002	1918	98-82-8
Cobalt sulfate	0758000			Cyanazine	0794000		
Cocculus	0759000	1584		Cyanoacetic acid	0108000		372-09-8
Coconut oil:edible	0760000	100 .		Cyanoacetonitrile	0254001	2647	109-77-3
Colchicine	0761000			Cyanobenzene	0040002	2224	100-47-0
Collodion	0762000	2059		Cyanobromide	0110002	1889	506-68-3
Copper	0763000	2000		Cyanoethane	0346001	2404	107-12-0
Copper acetate	0764000	9106		Cyanoethylene	0013002	1093	107-13-1
Copper acetoarsenite	0765000	1585		Cyanogen	0109000	1026	460-19-5
Copper arsenite	0766000	1586		Cyanogen bromide	0110003	1889	506-68-3
Copper bromide	0767000			Cyanogen chloride	0111000	1589	506-78-5
Copper chloride	0768000	2802		Cyanogen iodide	0112000		506-78-5
Copper cyanide	0769000	1587		Cyanogen monoiodide	0112001		506-78-5
Copper fluoroborate	0770000			Cyanomethane	0006001	1648	75-05-8
Copper formate	0771000			Cyanomethanol	0213001		107-16-4
Copper glycinate	0772000			Cyanotoluene	0324005	2470	140-29-4
Copper iodide	0773000			Cyanuric chloride	0113000	2670	108-77-0
Copper lactate	0774000			Cycasin	0795000		
Copper naphthenate	0775000			Cyclobutane	0796000	2601	
Copper nitrate	0776000			Cycloheptane	0114000	2241	291-64-5
Copper oxalate	0777000			Cycloheptatriene	0797000	2603	
Copper subacetate	0778000			Cycloheptene	0798000	2242	
Copper sulfate	0779000			Cyclohexane	0115000	1145	108-94-1
Copper sulfate, ammoniated	0780000	9110		Cyclohexanol	0799000		
Copper tartrate	0781000	9111		Cyclohexanone	0116000	1915	108-94-1
Coumaphos	0782000			Cyclohexanone peroxide	0800000	2119	
Coumatetralyl	0783000			Cyclohexatriene	0039003	1114	71-43-2
Creosote, coal tar	0784000	1993		Cyclohexene	0801000	2256	
Cresols	0786000	2076		Cyclohexenyl trichlorosilane	0802000	1762	
Cresyl glycidyl ether	0787000			Cycloheximide	0117000		66-81-9

Ohamiaal Nama	Chemical	UN	CAS	Oh omicel News	Chemical	UN	CAS
Chemical Name	ID No.	No.	No.	Chemical Name	ID No.	No.	No.
Cyclohexyl acetate	0804000	2243		Diallate	0829000		
Cyclohexyl isocyanate	0805000	2488		Diallyl ether	0831000	2360	
Cyclohexylamine	0118000	2357	108-91-8	Diallylamine	0830000	2359	
Cyclohexylketone	0116002	1915	108-94-1	Diamide	0223002		302-02-2
Cyclohexylmethane	0276001	2296	108-87-2	Diamine	0223004		302-02-2
Cyclopentane	0119000	1146	142-29-0	Diamine hydrate	0223003		302-02-2
Cyclopentanol	0806000	2244		Diamine sulfate	0224001		10034-93-2
Cyclopentanone	0807000	2245		Diaminotoluene	0385001	1709	95-80-7
Cyclopentene	0120000	2246	142-29-0	Diammonium sulfate	0833000		
Cyclopentimine	0338002	2401	110-89-4	Diammonium sulfide	0029002	2683	12135-76-1
Cyclopropane	0121000	1027	95-75-7	Diammonium sulfite	0030001	9090	10196-04-0
				Diatol	0142003	2366	105-58-8
				Diazan	0171001		514-73-8
Dalapon	0809000	1760		Diazinon	0836000	2783	
DCE	0408001	1303	75-35-4	Diazomethane	0837000		
DCEE	0129003	1916	111-44-4	Dibenzo (A,E) pyrene	0838000		
DCP	0137004	2048	77-73-6	Dibenzo (A,H) anthracene	0845000		
DDC	0154002	2262	79-44-7	Dibenzo (A,H) pyrene	0846000		
DDD	0810000	2761		Dibenzo (A,I) pyrene	0847000		
DEA	0140002	1154	109-89-7	Dibenzo (A,J) acridine	0848000		
DEAE	0141001	2686	100-37-8	Dibenzo (A,L) pyrene	0849000		
Decaborane	0123000	1868	17702-41-9	Dibenzofuran	0851000		
Decaborane tetrahydride	0123002	1868	17702-41-9	Dibenzoyl peroxide	0852000	2087	
Decaborane(14)	0123001	1868	17702-41-9	Dibenzyl ether	0124000		103-50-4
Decabromodiphenyl oxide	0812000			Diborane	0125000	1911	19287-45-7
Decahydronaphthalene	0813000	1147		Diborane hexahydride	0125002	1911	19287-45-7
Decaldehyde	0814000			Dibromoethane	0192003	1605	106-93-4
Decanoic acid	0815000			Dibromomethane	0126000	2664	74-95-3
DEK	0146001	1156	96-22-0	Dibutyl phenol	0860000		
Demeton	0820000			Dibutyl phthalate	0861000		
Demeton-s-methyl	0821000			Dicamba	0863000		
DEN	0140003	1154	109-89-7	Dichlobenil	0864000		
Denatured alcohol	0177004	1170	64-17-5	Dichlone	0865000		
DETA	0143003	2079	111-40-0	Dichloricide	0128002	1592	106-46-7
Deuterium	0822000	1957		Dichloro-1,2-propane	0351002	1279	78-87-5
Dextrose solution	0823000			Dichloroacetic acid	0866000	1764	
Diacetone alcohol	0824000	1148		Dichloroacetic acid, methyl ester	0278001	2299	116-54-1
Diacetone alcohol peroxide	0825000	2163		Dichloroacetyl chloride	0867000	1765	
Diacetyl	0826000	2346		Dichloroacetylene	0868000		
Diacetylmethane	0320003	2310	123-54-6	Dichlorobromomethane	0870000		
Diaflan	0320003		79-38-9	Dichlorobutene	1839001	2920	
Diakon	0290001		80-62-6	Dichlorodifluoromethane	0871000	1028	
Dialifos	0828000	3018	30 02 0	Dichlorodimethylsilane	0155001		75-78-5
Diamios	0020000	2010			,,,	_ 	
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Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Dichlorodimethylsilicon	0155002	1162	75-78-5	Diethyl ether	0144000	1155	60-29-7
Dichloroethane	0193002	1184	107-06-2	Diethyl glycol	0195003	1153	629-14-1
Dichloroether	0129004	1916	111-44-4	Diethyl oxide	0144001	1155	60-29-7
Dichloroethyl ether	0129005	1916	111-44-4	Diethyl phthalate	0901000		
Dichloroethylarsine	0186002	1892	598-14-1	Diethyl stilbestrol	0902000		
Dichloroethylphenylsilane	0204001	2435	1125-27-5	Diethyl sulfate	0903000	1594	
Dichloroethylsilane	0187001	1183	1789-58-8	Diethyl sulfide	0904000	2375	
Dichloromethane	0132000	1593	75-09-2	Diethyl zinc	0905000	1366	
Dichloromethyl benzene	0047004	1886	98-87-3	Diethylaluminum chloride	0887000		
Dichloromethyl ether	0133000	2249	542-88-1	Diethylaluminum hydride	0888000		
Dichloromethylphenylsilane	0873000			Diethylamine	0140000	1154	109-89-7
Dichloromethylsilane	0279001	1242	75-54-7	Diethylaminoethanol	0141000	2686	100-37-8
Dichloromonofluoromethane	0874000	1029		Diethylene ether	0169002	1165	123-91-1
Dichlorophenoxyacetic acid	0122001	2765	94-75-7	Diethylene glycol	0894000		
Dichlorophenoxyacetic esters	0876000			Diethylene glycol dibutyl ether	0895000		
Dichlorophenyl phosphine	0327002	2798	644-97-3	Diethylene glycol dimethyl ether	0896000		
Dichlorophenylarsine	0325001	1556	696-28-6	Diethylene glycol monobutyl			
Dichlorophenyltrichlorosilane	0134000	1766	27137-85-5	ether	0897000		
Dichloropropene	0135000	2047	542-75-6	Diethylene glycol monobutyl			
Dichloropropionic acid	0878000	1760		ether acetate	0898000		
Dichloropropylene	0135003	2047	542-75-6	Diethylene glycol monoethyl			
Dichlorosilane	0136000	2189	4109-96-0	ether	0899000		
Dichlorosilicone	0136001	2189	4109-96-0	Diethylene glycol monomethyl			
Dichlorosulfane	0366002	1828	10545-99-0	ether	0900000		
Dichlorotetrafluoroethane	0879000	1958		Diethylene oxide	1823000		
Dichlorvos	0882000	2783		Diethylene oximide	0298001	2054	110-91-8
Dicofol	0883000			Diethylenetriamine	0143000	2079	111-40-0
Dicrotophos	0884000			Diethylenimide oxide	0298002	2054	110-91-8
Dicyan	0109002	1026	460-19-5	Diethylethanolamine	0141003	2686	100-37-8
Dicyanogen	0109003	1026	460-19-5	Diethylketone	0146000	1156	96-22-0
Dicyanomethane	0254002	2647	109-77-3	Difluorine	0207002		7782-41-4
Dicyclopentadiene	0137000	2048	77-73-6	Difluorine monoxide	0316001	2190	7783-41-7
Dieldrin	0885000	2761		Difluorochloromethane	0906000	1018	
Diepoxybutane	0138000		1464-53-5	Difluorodichloromethane	0907000	1028	
Diesel	0139001			Difluoroethane	0147000	1030	75-37-6
Diesel fuel	0139000	1202		Difluorophosphoric acid	0909000	1768	
Diethanol amine	0886000			Diglycidyl ether	0910000		
Diethyl	0060002	1011	106-97-8	Diheptyl phthalate	0911000		
Diethyl benzene	0891000	2049		Dihydrogen dioxide	0232001	2015	7722-84-1
Diethyl carbamazine citrate	0892000			Dihydrogen selenide	0233001	2202	7783-07-5
Diethyl carbonate	0142000	2366	105-58-8	Dihydrooxirene	0199001	1040	75-21-8
Diethyl cellosolve	0195002	1153	629-14-1	Diisobutyl amine	0913000	2361	
Diethyl chlorophosphate	0893000			Diisobutyl carbinol	0914000		

ID No. 0916000	No.				No.	No.
	1157	No.	Chemical Name Dimethylacetamide	ID No. 0151000	110.	127-19-5
	1137		Dimethylacetone	0131000	1156	96-22-0
0917000	0050		Dimethylamide acetate	0140002	1130	127-19-5
0915000	2050		l '		1160	127-13-3
			l '			121-69-7
			· ·			121-69-7
						80-15-9
0922000						79-44-7
			'			79-44-7
			l '			67-63-0
						75-78-5
			l .			107-15-3
		674-82-8	l .			75-21-8
	3018		l '			151-56-4
0926000			1			
0152000	1032	124-40-3			1978	74-98-6
0173003		74-84-0		0948000		
0927000			Di-n-amyl phthalate	0835000		
0931000	1161		Di-n-amylamine	0834000	2841	
0150002	2252	110-71-4	Di-n-butyl amine	0854000	2248	
0156000	2381	624-92-0	Di-n-butyl ether	0855000	1149	
0157000	1033	115-10-6	Di-n-butyl ketone	0857000		
0158000	2265	68-12-2	Di-n-butyl phthalate	0862000		
0934000			Dinitrobenzene	0166000	1597	
			Dinitrochlorobenzene	0949000	1577	
0935000	2174		Dinitrocresol	0167003	1598	534-52-1
0936000			Dinitrogen monoxide	0311002		10024-97-2
0004001	1090	67-64-1	Dinitrogen tetroxide	0305001	1067	10102-44-0
0937000			Dinitro-o-cresol	0167000	1598	534-52-1
0163001	1164	75-18-3	Dinitrophenol (dry)	0168000		51-28-5
0153003	2253	121-69-7	Dinitrophenol (solution)	0168001		51-28-5
			Dinitrophenol (wetted with			
0161000	2267	2524-03-0	>15% water)	0168002		51-28-5
0940000			Di-n-octyl phthalate	0956000		
0941000			Dinofan	0168006		51-28-5
0944000			Dinonyl phthalate	0952000		
0162000	1595	77-78-1	Dinoterb	0953000		
0163000	1164	75-18-3	Di-n-propylamine	0170001	2383	142-84-7
0945000			Dioctyl adipate	0954000		
			Dioctyl phthalate	0955000		
			'.	0957000		
	2267	2524-03-0	Dioform	0131003	1150	540-59-0
	0918000 0919000 0920000 0921000 0922000 0923000 0924000 0148000 0149000 0925000 0152000 0152000 0152000 0157000 0157000 0158000 0934000 0934000 0936000 0004001 0937000 0163001 0153003 0161000 0941000 0941000 0944000 0162000 0163000	0918000 0919000 0920000 0921000 0922000 0923000 2171 0924000 1158 0148000 2521 0925000 3018 0926000 1032 0173003 0927000 0931000 1161 0150002 2252 0156000 2381 0157000 1033 0158000 2265 0934000 2174 0936000 1093 0004001 1090 0937000 2163 0161000 2267 0940000 0941000 0945000 1595 0163000 1164 0945000 0946000 0947000 0947000 0947000 0947000 0161001 2267	0918000 0919000 0920000 0921000 0922000 0922000 0923000 2171 0924000 1159 0148000 1158 108-18-9 0149000 2521 674-82-8 0925000 3018 0926000 0152000 1032 124-40-3 0173003 74-84-0 0927000 0931000 1161 0150002 2252 110-71-4 0156000 2381 624-92-0 0157000 1033 115-10-6 0158000 2265 68-12-2 0934000 0935000 2174 0936000 0004001 1090 67-64-1 0937000 0163001 1164 75-18-3 0153003 2253 121-69-7 0161000 2267 2524-03-0 0940000 0944000 0162000 1595 77-78-1 0163000 1164 75-18-3 0945000 0946000 0947000 0947000 0161001 2267 2524-03-0 0947000 0161001 2267 2524-03-0 0	Dimethylamine solution Dimethylamine solution Dimethylamine solution Dimethylamine solution Dimethylamine solution Dimethylamine solution Dimethylamine solution Dimethylamine Dimethylamina 0918000 Dimethylamine solution 0928000 0919000 Dimethylaminobenzene 0153001 0920000 Dimethylaminobenzene 0153002 0921000 Dimethylaminobenzene 0153002 0922000 Dimethylaminobenzene 0153002 0922000 Dimethylamine solution 0154003 0923000 2171 Dimethylamine chloride 0154000 0924000 1159 Dimethylamine chloride 0155000 0148000 158 108-18-9 Dimethylamine diamine 0191001 0149000 2521 674-82-8 Dimethylamine oxide 0199002 0925000 3018 Dimethylamine oxide 0199002 0925000 3018 Dimethylamine oxide 0199002 0925000 3018 Dimethylamine oxide 0199002 0927000 1032 124-40-3 Dimethylamine oxide 0341001 0152000 1161 Di-n-amyl phthalate 0835000 0931000 1161 Di-n-amylamine 0834000 0156000	Dimethylamine solution 0928000 1160	

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Dioxygen	0315002		7782-44-7	DMS0	0980000		
DIPA	0148001	1158	108-18-9	DNA	0165004	1596	97-02-9
Dipentene	0959000	2052		DNBP	0981000		
Diphacinone	0960000			Dodecanol	0982000		
Diphenamide	0961000			Dodecene	0983000		
Diphenyl	0962000			Dodecyl benzene	0984000		
Diphenyl amine	0963000			Dodecyl benzene sulfonic acid	0985000	2584	
Diphenyl amine chloroarsine	0964000	1698		Dodecyl benzene sulfonic acid,			
Diphenyl ether	0966000			calcium	0986000		
Diphenyl methane diisocyanate	0967000	2489		Dodecyl benzene sulfonic acid,			
Diphenyldichlorosilane	0965000	1769		isopropyl amine	0987000		
Diphosgene	0329005	1076	75-44-5	Dodecyl benzene sulfonic acid,			
Diphosphorus pentasulfide	0333001	1340	1314-80-3	sodium salt	0988000		
Dipotassium persulfate	0340002	1492	7727-21-1	Dodecyl benzene sulfonic acid,			
Diproanoate	0106005	1143	4170-30-3	triethanolamine	0989000		
Dipropylamine	0170000	2383	142-84-7	Dodecyl diphenyl ether			
Dipropylene dlycol methyl ether	0970000			disulfonate	0990000		
Dipropylene glycol	0968000			Dodecyl methacrylate	0994000		
Dipropylene glycol dibenzoate	0969000			Dodecyl sulfate, diethanolamine			
Diquat	0971000	2781		salt	0996000		
Direct black 38	0972000			Dodecyl sulfate, magnesium salt	0997000		
Direct blue 6	0973000			Dodecyl sulfate, sodium salt	0998000		
Direct brown 95	0974000			Dodecyl sulfate, triethanolamine			
Disulfoton	0975000	2783		salt	0999000		
Disulfur dichloride	0369002	1828	10025-67-9	Dodecyl/pentadecyl methacrylate	0995000		
Disulfuric acid	0314001	1831	8014-95-7	Dodecyltrichlorosilane	1000000	1771	
Di-tert-butyl peroxide	0858000	2102		Dorlone	0135004	2047	542-75-6
Dithane A-4	0166007	1597		Doryl	0078006		51-83-2
Dithiabutane	0156001	2381	624-92-0	Dowcide 7	0318001	3155	87-86-5
Dithiazanine iodide	0171000		514-73-8	Dowclene LS	0389002	2831	71-55-6
Dithiobiuret	0976000			Dowfume	1826000		
Ditridecyl phthalate	0977000			Dowtherm	0991000		
Diundecyl phthalate	0978000			Dry ice	0080004	1013	124-38-9
Diuron	0979000			Dursban	0105001	2783	2921-88-2
Divinyl	0059005	1010	106-99-0	Dutch oil	0193003	1184	107-06-2
Divinylene oxide	0215001	2389	110-00-9				
DMA	1822000			EB	0179001	1175	100-41-4
DMAC	0151004		127-19-5	ECH	0172004	2023	106-89-8
DMCC	0154004	2262	79-44-7	ED	0186003	1892	598-14-1
DMF	0158001	2265	68-12-2	EDB	0192004	1605	106-93-4
DMFA	0158002	2265	68-12-2	EGM	0197001	1188	109-86-4
DMH	0159002	1163	57-14-7	EGME	0197002	1188	109-86-4
DMPD	0160002		99-98-9	Elemental phosphorous	0331002		7723-14-0
DMS	0163002	1164	75-18-3	Endosulfan	1001000	2761	

	Chemical	UN	CAS		Chemical	UN	CAS
Chemical Name	ID No.	No.	No.	Chemical Name	ID No.	No.	No.
Endosulfan sulfate	1004000			Ethoxylated pentadecanol	1019000		
Endothion	1005000			Ethoxylated tetradecanol	1020000		
Endrin	1006000	2761		Ethoxylated tridecanol	1021000		
Endrin aldehyde	1007000			Ethyl acetate	0175000	1173	141-78-6
EPI	0172005	2023	106-89-8	Ethyl acetoacetate	1023000		
Epichlorohydrin	0172000	2023	106-89-8	Ethyl acetylene	1024000	2452	
EPN	1008000			Ethyl acrylate	0176000	1917	140-88-5
Epoxy propane	0353001	1280	75-56-9	Ethyl alcohol	0177000	1170	64-17-5
Epoxyethane	0199003	1040	75-21-8	Ethyl aluminum dichloride	1025000		
Epoxyethylbenzene	0363001		96-09-3	Ethyl aluminum sesquichloride	1026000		
Erythrene	0059006	1010	106-99-0	Ethyl amyl ketone	1027000	2271	
Estradiol 17 b	1009000			Ethyl azinphos	1029000		
Estrone	1010000			Ethyl bromide	1031000	1891	
Ethanal	0002002	1089	75-07-0	Ethyl bromoacetate	1032000	1603	
Ethanamine	0178002	1036	75-04-7	Ethyl butanoate	0182002	1180	105-54-4
Ethane dinitrate	0109004	1026	460-19-5	Ethyl butanol	1033000	2275	
Ethane (compressed gas)	0173000		74-84-0	Ethyl butyl ether	1034000	1179	
(Diethylamino) ethane	0392001	1296	121-44-8	Ethyl butyrate	0182000	1180	105-54-4
Ethane (refrigerated liquid)	0173001		74-84-0	Ethyl carbamate	1036000		
Ethanediol dimethyl ether	0150004	2252	110-71-4	Ethyl carbonate	0142004	2366	105-58-8
Ethanenitrile	0006002	1648	75-05-8	Ethyl cellosolve	0196002	1171	110-80-5
Ethanethiol	0202001	2363	75-08-1	Ethyl chloride	0183000	1037	75-00-3
Ethanoic acid	1840002		64-19-7	Ethyl chloroacetate	0184000	1181	105-39-5
Ethanoic anhydride	0003005	1715	108-24-7	Ethyl chlorocarbonate	0185003	1182	541-41-3
Ethanol	0177005	1170	64-17-5	Ethyl chloroformate	0185000	1182	541-41-3
Ethanolamine	0174000	2491	141-43-5	Ethyl chloromethanoate	0185004	1182	541-41-3
Ethanoyl bromide	0007002	1716	506-96-7	Ethyl chlorothioformate	1037000	2826	
Ethanoyl chloride	0008003	1717	75-36-5	Ethyl cyanide	0346002	2404	107-12-0
Ethene	0188002	1038	74-85-1	Ethyl cyclohexane	1038000		
Ethenoxide	0199005	1040	75-21-8	Ethyl ethanoate	0175003	1173	141-78-6
Ethenylbenzene	0362002	2055	100-42-5	Ethyl ether	0144003	1155	60-29-7
Ether	0144002	1155	60-29-7	Ethyl formate	0200000	1190	109-94-4
Etherin	0188003	1038	74-85-1	Ethyl glycol	0196004	1171	110-80-5
Ethienocarb	1011000			Ethyl glyme	0195005	1153	629-14-1
Ethine	0009001	1001	74-86-2	Ethyl hexaldehyde	1051000	1191	
Ethinylcarbinol	0343001	1986	107-19-7	Ethyl hexyl tallate	1055000		
Ethinylestradiol	1012000			Ethyl hydrosulfide	0202002	2363	75-08-1
Ethion	1013000	2783		Ethyl isocyanate	0201000	2481	109-90-0
Ethoprophos	1014000			Ethyl ketone	0146003	1156	96-22-0
Ethoxy triglycol	1022000			Ethyl lactate	1057000	1192	
Ethoxydihydropyran	1015000			Ethyl mercaptan	0202000	2363	75-08-1
Ethoxyethylbenzene	1016000			Ethyl methacrylate	1058000	2277	
Ethoxylated dodecanol	1017000			Ethyl methane sulfonate	1059000		
Ethoxylated nonylphenol	1018000			Ethyl methanoate	0200001	1190	109-94-4

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Ethyl methyl ether	1060000	1039		Ethylene glycol diethyl ether	0195000	1153	629-14-1
Ethyl methyl ketone	0280002	1193	78-93-3	Ethylene glycol dimethyl ether	0150005	2252	110-71-4
Ethyl monochloroacetate	0184002	1181	105-39-5	Ethylene glycol ethyl ether	0196003	1171	110-80-5
Ethyl nitrate	1061000	1993		Ethylene glycol isopropyl ether	1044000		
Ethyl nitrile	0006003	1648	75-05-8	Ethylene glycol methyl ether	0197003	1188	109-86-4
Ethyl nitrite	0203000	1194	109-95-5	Ethylene glycol monobutyl ether	1045000	2369	
Ethyl oxide	1821000			Ethylene glycol monobutyl ether			
Ethyl phenol	1836000			acetate	1046000		
Ethyl phosphonothioic dichloride	1062000	2927		Ethylene glycol monoethyl ether	0196000	1171	110-80-5
Ethyl phosphorodichloridate	1063000	2927		Ethylene glycol monoethyl ether			
Ethyl pirimifos	1064000			acetate	1047000	1172	
Ethyl propenoate	0176002	1917	140-88-5	Ethylene glycol monomethyl			
Ethyl rhodanate	0205001		542-90-5	ether	0197000	1188	109-86-4
Ethyl S	0180002	2734	538-07-8	Ethylene glycol phenyl ether	1048000		
Ethyl silicate	1066000	1292		Ethylene oxide	0199000	1040	75-21-8
Ethyl sulfate	1067000	1594		Ethylene tetrachloride	0375001	1897	127-18-4
Ethyl sulfhydrate	0202003	2363	75-08-1	Ethylene thiourea	1049000		
Ethyl sulfocyanate	0205002		542-90-5	Ethylene trichloride	0390002	1710	79-01-6
Ethyl t-butyl ether	1035000			Ethylenediamine	0191000	1604	107-15-3
Ethyl t-butyl ether	1070000			Ethylenediamine tetracetic acid	1040000	9117	
Ethyl thiocyanate	0205000		542-90-5	Ethyleneimine	0198000	1185	151-56-4
Ethyl vinyl ether	0406001	1302	109-92-2	Ethylformic acid	0345001	1848	79-09-4
Ethyl-2-propenoate	0176003	1917	140-88-5	Ethylic acid	1840003		64-19-7
Ethyl-3-ethoxypropionate	1050000			Ethylidene norbornene	1056000		
Ethylaldehyde	0002003	1089	75-07-0	Ethylidine chloride	0130001	2362	75-34-3
Ethylamine	0178000	1036	75-04-7	Ethylidine dichloride	0130002	2362	75-34-3
Ethylbenzene	0179000	1175	100-41-4	Ethylimine	0198005	1185	151-56-4
Ethyl-bis-(2-chloroethyl) amine	0180000	2734	538-07-8	Ethylphenyldichlorosilane	0204000	2435	1125-27-5
Ethylbutylamine	0181000	2734	13360-63-9	Ethyltrichlorosilane	0206000		115-21-9
Ethyldichloroarsine	0186000	1892	598-14-1	Ethyne	0009002		74-86-2
Ethyldichlorosilane	0187000	1183	1789-58-8	ETN	0178003	1036	75-04-7
Ethylene	0188000	1038	74-85-1	ETOH .	0177006	1170	64-17-5
Ethylene bromide	0192005	1605	106-93-4	Eufin	0142005	2366	105-58-8
Ethylene carboxylic acid	0012002	2218	79-10-7				
Ethylene chloride	0193004	1184	107-06-2	F-12	1072000	1028	
Ethylene chlorohydrin	0189000	1135	107-07-3	F-22	1073000	1018	
Ethylene cyanohydrin	0190000		109-78-4	FAA	0208001	2642	144-49-0
Ethylene dibromide	0192000	1605	106-93-4	Fenamiphos	1074000		
Ethylene dichloride	0193000	1184	107-06-2	Fenitrothion	1075000		
Ethylene fluoride	0147002	1030	75-37-6	Fensulfothion	1076000	2783	
Ethylene fluorohydrin	0194000		371-62-0	Ferric ammonium citrate	1077000	9118	
Ethylene glycol	1041000			Ferric ammonium oxalate	1078000	9119	
Ethylene glycol acetate	1042000			Ferric chloride	1079000	1773	
Ethylene glycol diacetate	1043000			Ferric fluoride	1080000	9120	

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
		NU.	INU.				
Ferric glycerophosphate	1081000	4400		Formic acid, isopropyl ester	0248001	2408	625-55-8
Ferric nitrate	1082000	1466		Formic acid, methy lester	0281001	1243	107-31-3
Ferric sulfate	1083000	9121		Formic ether	0200003	1190	109-94-4
Ferrous ammonium sulfate	1084000	9122		Formothion	1103000		
Ferrous chloride	1085000	1759		Formparanate	1104000		
Ferrous fluoroborate	1086000			Formyl hydrazino-4-			
Ferrous oxalate	1087000			(5-nitro-2-furyl)thiazole	1105000		
Ferrous sulfate	1088000	9125		Formyl trichloride	0096001	1888	67-66-3
Firedamp	0257003		74-82-8	Formylic acid	0214002	1779	64-18-6
FKS	0210001	1778	16961-83-4	Fosthietan	1106000		
Flue gas	0082004	1016	630-08-0	Fosvex	0377003		107-49-3
Fluenetil	1089000			Freon 10	0083004	1846	56-23-5
Fluoboric acid	1090000	1775		Freon 12	1107000	1028	
Fluometuron	1091000			Freon 150	0193006	1184	107-06-2
Fluoranthene	1092000			Freon 152	0147003	1030	75-37-6
Fluorene	1093000			Freon 20	0096002	1888	67-66-3
Fluoric acid	0231002	1052	7664-39-3	Freon 22	1108000	1018	
Fluorine monoxide	0316002	2190	7783-41-7	Freon 40	0273003	1063	74-87-3
Fluorine oxide	0316003	2190	7783-41-7	Freon F12	1109000		
Fluorine (compressed gas)	0207000	1045	7782-41-4	Fuberidazole	1110000		
Fluorine (cryogenic liquid)	0207001	9192	7782-41-4	Fuel oil #1	1828000		
Fluoroacetamide	1094000			Fuel oil #2	0139002		
Fluoroacetic acid	0208000	2642	144-49-0	Fuel oil #4	0139003		
Fluoroacetyl chloride	1095000			Fumaric acid	1111000		
Fluorobenzene	0209000	2387	462-06-6	Fumette	0259001		558-25-8
Fluoroethanoic acid	0208003	2642	144-49-0	Fuming sulfuric acid	0314002	1831	8014-95-7
Fluoroethene	0407001	1860	75-02-5	Furadan	0079001	2757	1563-66-2
Fluoroethylene	0407003	1860	75-02-5	Furadan 3G	0079002	2757	1563-66-2
Fluorophosgene	0084004	2414	353-50-4	Furaldehyde	0216002	1199	98-01-1
Fluorosilicic acid	0210000	1778	16961-83-4	Furan	0215000	2389	110-00-9
Fluorosulfonic acid	0211000	1777	7789-21-1	Furfural	0216000	1199	98-01-1
Fluorosulfuric acid	0211001	1777	7789-21-1	Furfuryl alcohol	1112000	2874	
Fluosilicic acid	0210002	1778	16961-83-4	Furodan	0079003	2757	1563-66-2
Fonofos	1099000	2783		Fusel oil	1113000	1201	
Forane 22B	1100000						
Formaldehyde cyanohydrin	0213000		107-16-4	GAA	0012003	2218	79-10-7
Formaldehyde (solution)	0212001	2209	50-00-0	Gallic acid	1114000		
Formaldehyde (solution,				Gallium trichloride	1116000		
flammable)	0212000	1198	50-00-0	Gallium, metal	1115000	2803	
Formalin	0212002		50-00-0	Gasoline	0217000	1203	8006-61-9
Formamide	1101000			GDME	0150006	2252	110-71-4
Formetanate hydrochloride	1102000			Germane	1117000	2192	-
Formic acid	0214000	1779	64-18-6	Gettysolve B	0221001	1208	110-54-3
Formic acid, ethyl ester	0200002	1190	109-94-4	Glacial acetic acid	1840004		64-19-7
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Balcal acrylic acid 0012004 2218 79-10-7	Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Nexadecyl sulfate, sodium salt 1141000 114	Glacial acrylic acid	0012004	2218	79-10-7	Hexachlorophene	1140000	2875	
Siyeerine 1119000		1118000						
Special continitrate 0306003 0143 55-63-0 Chloride 1142000 Cappail Continitrate 1120000 Cappail Continitrate 1120000 Cappail Continitrate 1120000 Cappail Continitrate Cappail Con	Glycerine				1			
Hexaethyl tetraphosphate and compressed gas 114000 1612 1414000	Glycerol trinitrate	0306003	0143	55-63-0		1142000		
Sycol cyan by din 0174002 2491 141-43-5 Hexafluoroacetone 1144000 2420 3490	Glycidaldehyde	1120000	2622		Hexaethyl tetraphosphate and			
Signal organolydrin 0190003 109-78-4 Hexafiluoroethane 1145000 2193 13901 methyl ether 0150007 2252 1107-1-4 Hexafiluorialicia caid 0210003 1778 1698-18-3 139000 methyl ether 0197004 1188 109-86-4 Hexaflydrobancine 0115004 2357 108-91-8 139000 139000 107-16-4 Hexaflydrobancine 0115004 2145 108-94-1 147000 148-94 147000 1490000 149000 149000 149000 149000 149000 149000 1490000 149000 149000 149000 149000 149000 149000 1490000 149000 149000 149000 149000 149000 149000 1490000 1490000 1490000 1490000 1490000 1490000 1490000 1490000 1490000 1490000 1490000 1490000 149000000000000000000000000000000000000	Glycidyl methacrylate	1121000			compressed gas	1143000	1612	
Signate Sign	Glycinol	0174002	2491	141-43-5	Hexafluoroacetone	1144000	2420	
Siycol methyl ether 0197004 1188 109-86-4 Hexahydronalaline 0118004 2357 108-91-8 3lycolnitrile 0213002 107-16-4 Hexahydrobenzene 0115002 1145 108-94-1 10-89-4 13lyconditrile 0213003 107-16-4 Hexahydrobenzene 0115002 1245 108-87-2 108-91-8 13lyconditrile 0213003 10500 1153 629-14-1 Hexahydrobenzene 0276002 2296 108-87-2 108-91-1 109-	Glycol cyanohydrin	0190003		109-78-4	Hexafluoroethane	1145000	2193	
Signolonitrile O213002 107-16-4 Hexalpydrobenzene O115002 1145 108-94-1	Glycol dimethyl ether	0150007	2252	110-71-4	Hexafluosilicic acid	0210003	1778	16961-83-4
Siyoonitrile 0213003 107-16-4 Hexahydropyridine 0338003 2401 110-89-4	Glycol methyl ether	0197004	1188	109-86-4	Hexahydroanaline	0118004	2357	108-91-8
Algorithm	Glycolonitrile	0213002		107-16-4	Hexahydrobenzene	0115002	1145	108-94-1
Siyosal 1122000	Glyconitrile	0213003		107-16-4	Hexahydropyridine	0338003	2401	110-89-4
Hexamethylene dilamine 1148000 2280 108-94-11 129000 1071-83-6 Hexamethylene dilamine 1148000 2281 12900000 1071-83-6 Hexamethylene dilamine 1149000 2281 149000 2493 1490000 2493	Glyme	0150008	2252	110-71-4	Hexahydrotoluene	0276002	2296	108-87-2
Sily-oxide	Glyme-1	0195006	1153	629-14-1	Hexamethyl phosphoramide	1147000		
Display Color	Glyoxal	1122000			Hexamethylene	0115003	1145	108-94-1
Hexamethylene tetramine 1151000 1328 Hexamethylene tetramine 1151000 1328 Hexamethylene 115000 2493 Hexamethylene 1205 1205 111-69-3 Hexamethylene 1205 1205 111-69-3 Hexamethylene 1205 120	Gly-oxide	0401002	1511	124-43-6	Hexamethylene diamine	1148000	2280	
Hexamethyleneimine 1150000 2493 110-54-3 110-601 12000 120	Glyphosate	0218000		1071-83-6	Hexamethylene diisocyanate	1149000	2281	
Hexane 0221000 1208 110-54-3 Halon 10001 0283001 2644 74-88-4 Halon 1001 0268003 1062 74-83-9 Halon 1001 0269002 7647-01-0 HCI 0229002 7647-01-0 Hexanon 0116003 1915 108-94-1 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222000 2370 592-41-6 Hexane 0222003 2370 592-41-6 Hexane 022203 2370 592-41-6 H	Grain alcohol	0177007	1170	64-17-5	Hexamethylene tetramine	1151000	1328	
Hexamedinitrile 0015003 2205 111-69-3 111-69-	Grasex	0086001	2075	75-87-6	Hexamethyleneimine	1150000	2493	
Hexanoic acid 1077003 2829 142-62-1					Hexane	0221000	1208	110-54-3
Hexanon 116003 1915 108-94-1	Halon 10001	0283001	2644	74-88-4	Hexanedinitrile	0015003	2205	111-69-3
Hexene	Halon 1001	0268003	1062	74-83-9	Hexanoic acid	0077003	2829	142-62-1
Hendecane 1123000 2330 Hexone 0285001 1245 108-10-1 Hexplachlor 1124000 Hexplachlor 1124000 Hexplachlor epoxide 1125000 Hexplachlor epoxide 1125000 Hexplachlorodibenzofurans 1126000 Hexplachlorodibenzofurans 1126000 Hexplachlorodibenzofurans 1127000 Hexplachlorodibenzofurans 1127000 Hexplachlorodibenzofurans 1127000 Hexplachlorodibenzofurans 1127000 Hexplachlorodibenzofurans 1127000 Hexplachlorodibenzofurans 1127000 Hexplachlorodibenzofurans 1128000 Hexplachlorodibenzofurans 1128000 Hexplachlorodibenzofurans 1128000 Hydrazine hydrate 0190004 109-78-4 Hydrazine hydrate 0190004 109-78-4 Hydrazine hydrate 0223005 302-02-2 Hydrazine hydrate 0224002 10034-93-2 Hydrazine hydrate 0224002 10034-93-2 Hydrazine monosulfate 0224003 10034-93-2 Hexachlorodication 113000 2729 Hydrazine (64%) 0223001 2029 302-02-2 Hydrazine (64%) 0223001 2029 302-02-2 Hexachlorodicatione 1133000 2729 Hydrazine (64%) 0223001 2029 302-02-2 Hexachlorodicatione 1135000 2646 Hydrazine (64%) Hydrazine (64%) 0223001 2029 302-02-2 Hydrazinium sulfate 0224004 10034-93-2 Hexachlorocyclopentadiene 1135000 2646 Hydrazonethane 0282001 1244 60-34-4 Hydrazonethane 0282001 1244 60-34-4 Hydrazonethane 0282001 1789 7647-01-0 Hydrochloric acid 0225000 1789 7647-01-0 Hydrochloric acid 0230003 1051 74-90-8 Hexachlorodibenzofurans 1138000 9037 Hydrocyanic acid 0230003 1051 74-90-8	HCI	0229002		7647-01-0	Hexanon	0116003	1915	108-94-1
Hery acetate 112000 Hery acetate 1155000 Hery acetate 1155000 Hery acetate 1155000 Hery acetate 112000 Hery acetate 113000 Her	HCN	0230001	1051	74-90-8	Hexene	0222000	2370	592-41-6
Hexplace	Hendecane	1123000	2330		Hexone	0285001	1245	108-10-1
Heytachlorodibenzofurans 1126000	Heptachlor	1124000			Hexyl acetate	1155000		
Heptachlorodibenzo-p-dioxins 1127000	Heptachlor epoxide	1125000			Hexylene	0222003	2370	592-41-6
Heptamethylene 0114001 2241 291-64-5 Hydracrylonitrile 0190004 109-78-4 Hydracrylonitrile 0190004 109-78-4 Hydracrylonitrile 0190004 109-78-4 Hydracrylonitrile 0223005 302-02-2 Hydrazine hydrate 0224002 10034-93-2 Heptyl acetate 1130000 Hydrazine monosulfate 0224003 10034-93-2 Heptylene 0220002 2278 592-76-7 Hydrazine sulfate 0224000 10034-93-2 Hexachloroacetone 1131000 2661 Hydrazine (<64%) 0223000 2030 302-02-2 Hydrazine (anhydrous or >64%) 0223001 2029 302-02-2 Hexachlorobutadiene 1133000 2279 Hydrazinium sulfate 0224004 10034-93-2 Hexachlorocyclohexanes 1134000 Hydrazine (anhydrous or >64%) 0223001 2029 302-02-2 Hydrazinium sulfate 0224004 10034-93-2 Hexachlorocyclohexanes 1136000 Hydrazine (anhydrous or >64%) 0223001 1244 60-34-4 Hexachlorodibenzofurans 1136000 Hydrochloric acid 0225000 1789 7647-01-0 Hydrochloric acid 0225000 1789 7647-01-0 Hydrochloric ether 0183001 1037 75-00-3 Hexachloroethane 1138000 9037 Hydrocyanic acid 0230003 1051 74-90-8	Heptachlorodibenzofurans	1126000			Hexylene glycol	1156000		
Heptane	Heptachlorodibenzo-p-dioxins	1127000			HF	0231003	1052	7664-39-3
Heptanoic acid 1128000 Hydrazine hydrate 0223005 302-02-2 Hydrazine hydrogen sulfate 0224002 10034-93-2 Heptyl acetate 1130000 Hydrazine monosulfate 0224003 10034-93-2 Heptylene 0220002 2278 592-76-7 Hydrazine sulfate 0224000 10034-93-2 Hydrazine sulfate 0224000 2030 302-02-2 Hydrazine (<64%) 0223000 2030 302-02-2 Hydrazine (anhydrous or >64%) 0223001 2029 302-02-2 Hydrazinium sulfate 0224004 10034-93-2 Hydrazoic acid, sodium salt 0357002 1687 26628-22-8 Hydrazomethane 1135000 2646 Hydrazomethane 0282001 1244 60-34-4 Hydrochloric acid Hydrochloric acid 0225000 1789 7647-01-0 Hydrochloric ether 0183001 1037 75-00-3 Hydrochloric ether 0183001 1037 75-00-3 Hydrocyanic acid 0230003 1051 74-90-8 Hydrocyanic acid 103000 1030000 103000000 1030000000000	Heptamethylene	0114001	2241	291-64-5	HN1	0180003	2734	538-07-8
Heptanol	Heptane	0219000	1206	142-82-5	Hydracrylonitrile	0190004		109-78-4
Hydrazine monosulfate 1130000 Hydrazine monosulfate 0224003 10034-93-24 10	Heptanoic acid	1128000			Hydrazine hydrate	0223005		302-02-2
Heptylene	Heptanol	1129000			Hydrazine hydrogen sulfate	0224002		10034-93-2
Hexachloroacetone	Heptyl acetate	1130000			Hydrazine monosulfate	0224003		10034-93-2
Hexachlorobenzene	Heptylene	0220002	2278	592-76-7	Hydrazine sulfate	0224000		10034-93-2
Hexachlorobutadiene 1133000 2279 Hydrazinium sulfate 0224004 10034-93-24 Hexachlorocyclohexanes 1134000 Hydrazoic acid, sodium salt 0357002 1687 26628-22-8 Hexachlorocyclopentadiene 1135000 2646 Hydrazomethane 0282001 1244 60-34-4 Hexachlorodibenzofurans 1136000 Hydrochloric acid 0225000 1789 7647-01-0 Hexachlorodibenzo-p-dioxins 1137000 Hydrochloric ether 0183001 1037 75-00-3 Hexachloroethane 1138000 9037 Hydrocyanic acid 0230003 1051 74-90-8	Hexachloroacetone	1131000	2661		Hydrazine (<64%)	0223000	2030	302-02-2
Hexachlorocyclohexanes	Hexachlorobenzene	1132000	2729				2029	
Hexachlorocyclopentadiene 1135000 2646 Hydrazomethane 0282001 1244 60-34-4 Hexachlorodibenzofurans 1136000 Hydrochloric acid 0225000 1789 7647-01-0 Hexachlorodibenzo-p-dioxins 1137000 Hydrochloric ether 0183001 1037 75-00-3 Hexachloroethane 1138000 9037 Hydrocyanic acid 0230003 1051 74-90-8	Hexachlorobutadiene	1133000	2279		·			10034-93-2
Hexachlorodibenzofurans 1136000 Hydrochloric acid 0225000 1789 7647-01-0 Hexachlorodibenzo-p-dioxins 1137000 Hydrochloric ether 0183001 1037 75-00-3 Hexachloroethane 1138000 9037 Hydrocyanic acid 0230003 1051 74-90-8	Hexachlorocyclohexanes	1134000						26628-22-8
Hexachloroethane 1137000 Hydrochloric ether 0183001 1037 75-00-3 Hexachloroethane 1138000 9037 Hydrocyanic acid 0230003 1051 74-90-8	Hexachlorocyclopentadiene	1135000	2646		*			
Hexachloroethane 1138000 9037 Hydrocyanic acid 0230003 1051 74-90-8	Hexachlorodibenzofurans	1136000			*			
	Hexachlorodibenzo-p-dioxins	1137000			*			
Hexachloronaphthalene 1139000 Hydrocyanic acid, sodium salt 0358001 1689 143-33-9	Hexachloroethane	1138000	9037		' '			
	Hexachloronaphthalene	1139000			Hydrocyanic acid, sodium salt	0358001	1689	143-33-9

Chemical Name IDNo. No. No. Chemical Name IDNo. No. No. Hydrocyanic acid, solution 0230002 1951 74-90-8 Imno (powder) 1184000 1184000 1843-34-06 Hydroflurian 0379002 2056 199-99-9 Imno (powder) 1184000 1237000 1994 13463-40-6 Hydrogen bromide 023000 1988 1363-40-6 Imno (powder) 1185000 1270 1984 1343-40-6 Imno (powder) 1185000 1270 1984 1343-40-6 Imno (powder) 1185000 1284 1343-40-6 Imno (powder) 1185000 1284 1343-40-6 Imno (powder) 1186000 1287 148-42-1 Imno (powder) 1186000 1284 148-42-1 Imno (powder) 1186000 1287 148-42-1 Imno (powder) 1186000 128-42-1 148-42-1 Imno (powder) 1186000		Chemical	UN	CAS		Chemical	UN	CAS
Hydrogranic acid, solution 0230002 0250 74-90-8	Chemical Name		_		Chemical Name		_	
hydrofluoric acid 0226000 1790 7664-39-3			1051		Iron (powder)			-
hydrogen arsenic 0379002 256 109-99-9 Hydrogen bromide 0328000 2188 7784-2-1 1500-00-00 1165000 1218 1166000 1218 1166000 1218 1166000 1218 1166000 1218 1166000 1218 1167000 1218 1				7664-39-3			1994	13463-40-6
Hydrogen bromide 0228002 1048 10035-10-6	•	0379002	2056	109-99-9	·	0237000	1994	13463-40-6
Hydrogen bromide 0228002 1048 10035-10-6 Sobutane 1166000 1212 1278 1478 1479	•	0037003	2188	7784-42-1	, ,	1165000		
Hydrogen chordide (gas)		0228000	1048	10035-10-6	Isobutane	0238000	1969	75-28-5
Hydrogen chloride (gas) 0.229001 2.05 7647-01-0 150butyl aideltyde 1167000 2345 169001 169001 2351 169001 2351 169001 2351 169001 2351 169001 2351 169001 2351 169001 169001 2351 169001 16	Hydrogen bromide, anhydrous	0228002	1048	10035-10-6	Isobutanol	1166000	1212	
Hydrogen chloride (refrigerated 169000 22901 2186 7647-01-0 159001 1789 7647-01-0 159001 1789 7647-01-0 159001 1789 7647-01-0 159001 169000 1241 168000 1214 17890-0 17890 16847-01-0 17890-0 168490-1 168000 1214 17890-0 17890-0 17890-0 18990-0 1		0214003	1779	64-18-6	Isobutenyl methyl ketone	1841001	1229	141-79-7
Hydrogen chloride (refrigerated 16900 239 1814 1804 1		0229000	1050	7647-01-0		1167000	2045	
Hydrogen cyanide 0230001 02300					Isobutyl formate	1169000	2393	
Hydrogen cyanide		0229001	2186	7647-01-0	Isobutyl methyl carbinol	0284001	2053	108-11-2
Hydrogen fluoride 0232002 2015 7722-84-1	Hydrogen chloride (solution)	0225001	1789	7647-01-0	Isobutyl methyl ketone	0285002	1245	108-10-1
Hydrogen fluoride 0231000 1052 7664-39-3 Sobutylene 0291001 2288 691-37-2 Hydrogen fluoride, solution 0226001 1790 7664-39-3 Sobutyric acid 1170000 2529 Hydrogen hexafluorosilicate 0210004 1778 6961-83-4 Isobutyric mitrie 0240000 2284 78-82-0 Hydrogen initrate 030203 7697-37-2 Isocyanatoethane 0201002 2481 109-90-0 Hydrogen peroxide (>60%) 0232000 2015 7722-84-1 Isocyanic acid, ethyl ester 0201001 2481 109-90-0 Hydrogen peroxide (>60%) 0330001 2199 7803-51-2 Isodecaldehyde 1171000 1172000 Hydrogen phesphide 0330001 2199 7803-51-2 Isodecaldehyde 1171000 1172000 Hydrogen selenide 0233000 2020 7783-07-5 Isofluorophate 1173000 1173000 Hydrogen sulfide 0330001 1330 7664-39-9 Isohexene 0291002 2288 691-37-2 Hydrogen (cryogenic liquid) 0227001 1966 1333-74-0 Isooctaldehyde 1176000 1176000 Hydrogen (cryogenic liquid) 0227001 1966 1333-74-0 Isooctaldehyde 1176000 1176000 Hydrogyane (cryogenic liquid) 0227001 1966 1333-74-0 Isooctaldehyde 1176000 1176000 Hydrogyane (cryogenic liquid) 0233000 2033003-783-06-4 Isopentadiene 0241001 1218 78-79-5 Hydroxyacenitrile 0213004 107-16-4 Isopentadiene 1177000 1265 Hydroxyalamine sulfate 1161000 2865 Isophorone dilamine 1179000 2289 Hydroxypropyninoritrile 0236000 2790 78-97-7 Isophorone dilamine 1179000 229 Hydroxypropyninethacrylate 136000 1791 78-98-5 Isopropene cyanide 024000 1218 78-98-6 Hydroxypropyninoritrile 116300 1791 78-98-5 Isopropene cyanide 024000 1218 78-98-6 Hydroxypropyninoritrile 116300 1791 78-98-5 Isopropene cyanide 024000 1218 78-98-6 Hydroxypropyninoritrile 116300 1791 78-98-5 Isopropene cyanide 024000 1218 78-98-6 Hydroxypropyninoritrile 116300 1791 78-98-5 Isopropene cyanide 024000 1218 78-98-6 Hydroxypropyninorit	Hydrogen cyanide	0230000	1051	74-90-8	Isobutylamine	1168000	1214	
Hydrogen fluoride, solution 0226001 1790 7664-39-3 Isobutyric acid 1170000 2524 78-82-0 14700gen hexafluorosilicate 0210004 1778 16961-83-4 Isobutyronitrile 0240000 2284 78-82-0 14700gen initrate 032003 2015 7762-84-1 Isocyanicacid, ethyl ester 0201001 2481 109-90-0 14700gen peroxide (>60%) 0322003 2015 7722-84-1 Isocyanicacid, ethyl ester 0201001 2481 109-90-0 14700gen peroxide (>60%) 032000 2015 7722-84-1 Isocyanicacid, ethyl ester 0210001 2481 109-90-0 14700gen peroxide (35% solution) 1158000 2199 7803-51-2 Isodecaldehyde 1171000 1170000 14700gen peroxide (35% solution) 1158000 2199 7803-51-2 Isodecaldehyde 1171000 11700000 11700000 11700000 11700000 11700000 11700000 11700000 11700000 11700000 11700000 11700000 1170000000000	Hydrogen dioxide	0232002	2015	7722-84-1	Isobutylene	0239000	1055	115-11-7
Hydrogen hexafluorosilicate 0210004 1778 16961-83-4 Isobutyronitrile 0240000 2284 78-82-6 149drogen indide, anhydrous 1157000 2157 7697-37-2 Isocyanatoethane 0201002 2481 109-90-0 149drogen nitrate 0330203 2015 7722-84-1 Isocyanatoethane 0201001 2481 109-90-0 149drogen peroxide (>60%) 0232000 2015 7722-84-1 Isocyanic acid, ethyl ester 0201001 2481 109-90-0 149drogen peroxide (>60%) 0158000 2157 7722-84-1 Isocyanic acid, ethyl ester 0201001 2481 109-90-0 149drogen peroxide (>60%) 0158000 2157 7722-84-1 Isocyanic acid, ethyl ester 0201001 2481 109-90-0 149drogen peroxide (>60%) 0158000 2157 7722-84-1 Isocyanic acid, ethyl ester 0201001 2481 109-90-0 149drogen peroxide (>60%) 023000 2157 7722-84-1 Isocyanic acid, ethyl ester 0201001 2481 109-90-0 149drogen peroxide (>60%) 0330001 2157 7722-84-1 Isocyanic acid, ethyl ester 0210001 2480 024-83-9 Isodecaldehyde 1171000 1170000 117000 117000 117000 117000 117000 117000 1170000 1170000 1170000 1170000 1170000 1170000 1170000 1170000 1170000 11700000 1170000000000	Hydrogen fluoride	0231000	1052	7664-39-3	Isobutylene	0291001	2288	691-37-2
Hydrogen indide, anhydrous 115700 2197 7697-37-2 Isocumene 0348001 2364 103-90-0	Hydrogen fluoride, solution	0226001	1790	7664-39-3	Isobutyric acid	1170000	2529	
Hydrogen nitrate 0302003 7697-37-2 Socyanatoethane 0201002 2481 109-90-0 Hydrogen oxide 0232003 2015 7722-84-1 Socyanic acid, ethyl ester 0286001 2481 109-90-0 Hydrogen peroxide (>60%) 0232000 2157 7722-84-1 Socyanic acid, methyl ester 0286001 2480 2480 2480-9 Hydrogen peroxide (35% solution) 1158000 2199 7803-51-2 Sodrin 1172000 1172000 Hydrogen selenide 0330001 2199 7803-51-2 Isodrin 1172000 1172000 Hydrogen sulfide 0234000 2282 7783-07-5 Isofluorophate 1173000 1191 Hydrogen (compressed gas) 022700 1049 1333-74-0 Isooctane 1175000 1191 Hydrogen (compressed gas) 0227001 1966 1333-74-0 Isooctane 1175000 1262 Hydroyen (cryogenic liquid) 0227001 1966 1333-74-0 Isooctane 1176000 1191 Hydroyen (cryogenic liquid) 0227001 1966 1333-74-0 Isooctane 1176000 1191 Hydroxybenzene 0323005 0783-06-4 Isopentadiene 0241001 1218 78-79-5 Hydroxybenzene 0323005 0783-49-8 Isophrone 1177000 2289 Hydroxylamine sulfate 1161000 2865 Isophrone 1179000 2299 Hydroxypropinonitrile 0250002 27813-02-1 Isophrone diamine 1179000 2290 Hydroxypropyl methacrylate 0236000 27813-02-1 Isophrone diamine 1181000 1218 78-79-5 Hydroxypropyl methacrylate 0236000 27813-02-1 Isopropanol mine 0243000 024300	Hydrogen hexafluorosilicate	0210004	1778	16961-83-4	Isobutyronitrile	0240000	2284	78-82-0
Hydrogen oxide 0232003 2015 7722-84-1 Isocyanic acid, ethyl ester 0201001 2481 109-90-0 Hydrogen peroxide (>60%) 0232000 2015 7722-84-1 Isocyanic acid, ethyl ester 0286001 2480 624-83-9 Hydrogen peroxide (35% solution) 1158000 2014 Isodecaldehyde 1171000 1172000 <t< td=""><td></td><td>1157000</td><td>2197</td><td></td><td>Isocumene</td><td>0348001</td><td>2364</td><td>103-65-1</td></t<>		1157000	2197		Isocumene	0348001	2364	103-65-1
Hydrogen peroxide (>60%) 0232000 2015 7722-84-1 Isocyanic acid, methyl ester 0286001 2480 624-83-9 Hydrogen peroxide (35% solution) 1158000 2014 Isodecaldehyde 1171000 1172000	Hydrogen nitrate	0302003		7697-37-2	Isocyanatoethane	0201002	2481	109-90-0
Hydrogen peroxide (35% solution) 1158000 2014 Isodecaldehyde 1171000 Itraporation 1171000 Itraporation 1171000 Itraporation Itraporation 1171000 Itraporation 1171000 Itraporation 1171000 Itraporation Itraporation 1171000	Hydrogen oxide	0232003	2015	7722-84-1	Isocyanic acid, ethyl ester	0201001	2481	109-90-0
Hydrogen phosphide 0330001 2199 7803-51-2 Isodrin 1172000 1172000 1173000	Hydrogen peroxide (>60%)	0232000	2015	7722-84-1	Isocyanic acid, methyl ester	0286001	2480	624-83-9
Hydrogen selenide 0233000 2202 7783-07-5 Isofluorophate 1173000 2288 691-37-2 Hydrogen sulfate 0368001 1830 7664-93-9 Isobexene 0291002 2288 691-37-2 Hydrogen sulfide 0234000 1053 7783-06-4 Isooctaldehyde 1174000 1191 Hydrogen (compressed gas) 0227001 196 1333-74-0 Isooctale 1175000 1262 Hydrogen (cryogenic liquid) 0227001 196 1333-74-0 Isooctyl ester 1710000 176000 Hydroguinone 115900 2662 Isopentadiene 0241001 1218 78-79-5 Hydroxylarcetonitrile 0213004 1053 7783-06-4 Isopentadiene 0241001 1218 78-79-5 Hydroxylamine 023005 108-95-2 Isophorone 1178000 2289 1440 1440 1450 1450 1450 1450 1450 1450 1450 1450 1450 1450 1450 1450 1450 1450	Hydrogen peroxide (35% solution)	1158000	2014		Isodecaldehyde	1171000		
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Hydrogen (cryogenic liquid) 196 1333-74-0 Isooctyl alcohol 1176000 Hydroquinone 1159000 2662 Isooctyl ester 1710000 Hydrosulfuric acid 1234001 1053 7783-06-4 Isopentadiene 1241001 1218 78-79-5 Hydroxyacetonitrile 0213004 107-16-4 Isopentane 1177000 1265 Hydroxybenzene 0323005 108-95-2 Isophorone 1178000 11800000 1180000000000	Hydrogen sulfide	0234000	1053	7783-06-4	Isooctaldehyde	1174000	1191	
Hydrogulinone 1159000 2662 Sophataliene 1710000 1218 78-79-5 Hydroxyacetonitrile 0213004 1053 7783-06-4 Isopentadiene 1177000 1265 Hydroxyacetonitrile 0213004 107-16-4 Isopentane 1177000 1265 Hydroxybenzene 0323005 108-95-2 Isophorone 1178000 Hydroxylamine 0235000 7803-49-8 Isophorone diamine 1179000 2289 Hydroxylamine sulfate 1161000 2865 Isophorone diisocyanate (IPDI) 118000 2290 Hydroxypropinonitrile 0250002 3275 78-97-7 Isophthalic acid 1181000 Hydroxypropyl acrylate 1162000 27813-02-1 Isopropanol 0241000 1218 78-79-5 Hydroxypropyl methacrylate 0236000 27813-02-1 Isopropanol 0242000 1219 67-63-0 Hypochlorite 0360005 1791 7681-52-9 Isopropanolamine 0243000 78-96-6 Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Isopropenyl acetate 1182000 24000 24000 24000 24000 Indeno(1,2,3-CD)pyrene 1163000 1162 75-78-5 Isopropenyl alcohol 0242003 1219 67-63-0 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl alcohol 0242003 2344 75-26-3 Iddine cyanide 0112002 506-78-5 Isopropyl alcohol 0057001 2344 75-26-3	Hydrogen (compressed gas)	0227000	1049	1333-74-0	Isooctane	1175000	1262	
Hydroxylatric acid 0234001 1053 7783-06-4 Isopentadiene 0241001 1218 78-79-5 107-16-4 Isopentane 1177000 1265	Hydrogen (cryogenic liquid)	0227001	1966	1333-74-0	Isooctyl alcohol	1176000		
Hydroxyacetonitrile 0213004 107-16-4 Isopentane 1177000 1265 Hydroxybenzene 0323005 108-95-2 Isophorone 1178000 2289 Hydroxylamine 0235000 7803-49-8 Isophorone diamine 1179000 2289 Hydroxylamine sulfate 1161000 2865 Isophorone diisocyanate (IPDI) 1180000 2290 Hydroxypropinonitrile 0250002 3275 78-97-7 Isophorone diisocyanate (IPDI) 1180000 2290 Hydroxypropyl acrylate 1162000 1162000 Isopropanol 1218 78-79-5 Hydroxypropyl methacrylate 0236000 27813-02-1 Isopropanol 0242000 1219 67-63-0 Hypochlorite 0360005 1791 7681-52-9 Isopropanolamine 0243000 78-96-6 Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl benzene 0244000 2303 98-83-9 Inerton-DMCS <td>Hydroquinone</td> <td>1159000</td> <td>2662</td> <td></td> <td>isooctyl ester</td> <td>1710000</td> <td></td> <td></td>	Hydroquinone	1159000	2662		isooctyl ester	1710000		
Hydroxybenzene 0323005 108-95-2 Isophorone diamine 1178000 2289 Hydroxylamine 0235000 7803-49-8 Isophorone diamine 1179000 2289 Hydroxylamine sulfate 1161000 2865 Isophorone diisocyanate (IPDI) 1180000 2290 Hydroxypropinonitrile 0250002 3275 78-97-7 Isophthalic acid 1181000 1218 78-79-5 Hydroxypropyl acrylate 1162000 27813-02-1 Isopropanol 0241000 1218 78-79-5 Hypochlorite 0360005 1791 7681-52-9 Isopropanolamine 0243000 78-96-6 Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl acetate 1182000 2403 Inerton-DMCS 0155004 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0112002 506-78-5 Isopropyl bromide 0057001 2344	Hydrosulfuric acid	0234001	1053	7783-06-4	Isopentadiene	0241001	1218	78-79-5
Hydroxylamine 0235000 7803-49-8 Isophorone diamine 1179000 2289 Hydroxylamine sulfate 1161000 2865 Isophorone diisocyanate (IPDI) 1180000 2290 Hydroxypropinonitrile 0250002 3275 78-97-7 Isophthalic acid 1181000 Hydroxypropyl acrylate 1162000 Isophthalic acid 1181000 1218 78-79-5 Hydroxypropyl methacrylate 0236000 27813-02-1 Isopropanol 0242000 1219 67-63-0 Hypochlorite 0360005 1791 7681-52-9 Isopropanolamine 0243000 78-96-6 Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl acetate 1182000 2403 Inerton- DW-DMC 0155003 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl bromide 0057001 2344 75-26-3	Hydroxyacetonitrile	0213004		107-16-4	Isopentane	1177000	1265	
Hydroxylamine sulfate 1161000 2865 Isophorone diisocyanate (IPDI) 1180000 2290	Hydroxybenzene	0323005		108-95-2	Isophorone	1178000		
Hydroxypropinonitrile 0250002 3275 78-97-7 Isophthalic acid 1181000 Hydroxypropyl acrylate 1162000 Isoprene 0241000 1218 78-79-5 Hydroxypropyl methacrylate 0236000 27813-02-1 Isopropanol 0242000 1219 67-63-0 Hypochlorite 0360005 1791 7681-52-9 Isopropanolamine 0243000 78-96-6 Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl acetate 1182000 2403 Inerton- DW-DMC 0155003 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl alcohol 0242003 1219 67-63-0 Iodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3	Hydroxylamine	0235000		7803-49-8	Isophorone diamine	1179000	2289	
Hydroxypropyl acrylate 1162000 27813-02-1 Isoprene 0241000 1218 78-79-5	Hydroxylamine sulfate	1161000	2865		Isophorone diisocyanate (IPDI)	1180000	2290	
Hydroxypropyl methacrylate 0236000 27813-02-1 Isopropanol 0242000 1219 67-63-0 Hypochlorite 0360005 1791 7681-52-9 Isopropanolamine 0243000 78-96-6 Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl acetate 1182000 2403 Inerton-DW-DMC 0155003 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl alcohol 0242003 1219 67-63-0 Iodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3	Hydroxypropinonitrile	0250002	3275	78-97-7	Isophthalic acid	1181000		
Hypochlorite 0360005 1791 7681-52-9 Isopropanolamine 0243000 78-96-6 Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl acetate 1182000 2403 Inerton- DW-DMC 0155003 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl alcohol 0242003 1219 67-63-0 Iodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3	Hydroxypropyl acrylate	1162000			Isoprene	0241000	1218	78-79-5
Hyponitrous ether 0203001 1194 109-95-5 Isopropene cyanide 0264002 3079 126-98-7 Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl acetate 1182000 2403 Inerton- DW-DMC 0155003 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl alcohol 0242003 1219 67-63-0 Iodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3	Hydroxypropyl methacrylate	0236000		27813-02-1	Isopropanol	0242000	1219	67-63-0
Isopropenyl acetate 1182000 2403 240	Hypochlorite	0360005	1791	7681-52-9	Isopropanolamine	0243000		78-96-6
Indeno(1,2,3-CD)pyrene 1163000 Isopropenyl benzene 0244000 2303 98-83-9 Inerton- DW-DMC 0155003 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl alcohol 0242003 1219 67-63-0 Iodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3	Hyponitrous ether	0203001	1194	109-95-5	Isopropene cyanide	0264002	3079	126-98-7
Inerton- DW-DMC					Isopropenyl acetate	1182000	2403	
Inerton- DW-DMC 0155003 1162 75-78-5 Isopropenyl methyl ketone 0287001 1246 814-78-8 Inerton-DMCS 0155004 1162 75-78-5 Isopropyl alcohol 0242003 1219 67-63-0 Iodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3	Indeno(1,2,3-CD)pyrene	1163000			Isopropenyl benzene	0244000	2303	98-83-9
lodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3		0155003	1162	75-78-5	Isopropenyl methyl ketone	0287001	1246	814-78-8
lodine cyanide 0112002 506-78-5 Isopropyl bromide 0057001 2344 75-26-3	Inerton-DMCS	0155004	1162	75-78-5	Isopropyl alcohol	0242003	1219	67-63-0
	lodine cyanide	0112002			Isopropyl bromide	0057001	2344	75-26-3
		0283002	2644	74-88-4	Isopropyl chloride	1183000	2356	

Isopropy chlorocarbonate 0247002 2407 108.23-6 Lead fluorofide 1206000 291 1207000 292 1207000 292 1207000 292 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 1207000 293 29	Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Suppropy I chloroformate 0247000 247 18-23-6 Lead fluoroborate 1207000 120700 120700 120700 120700 1207000 120700 12070000 12070000 1207000 12070000 12070000 12	Isopropyl chlorocarbonate	0247002	2407	108-23-6	Lead fluoride	1206000	2811	
Sepropsyl cyclohexane	Isopropyl chloroformate	0247000	2407	108-23-6	Lead fluoroborate	1207000	2291	
Lead phosphate 118500	Isopropyl cyanide	0240002	2284	78-82-0	Lead iodide	1208000		
Sopropy marthy ketone 024800 2408 625.55-8 Lad starate 1211000 1721 121000 1210000 1210000 1210000 1210000 1210000 1210000000000	Isopropyl cyclohexane	1184000			Lead nitrate	1209000	1469	
Septropy Intrale 188000 2397 563-80-4 Lead sulfate 1212000 1794 1215000 12150000 1216000000 1226 Lead sulfate 1213000 1215000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 12150000 121500000000000000000000000000000000000	Isopropyl ether	1185000			Lead phosphate	1210000		
	Isopropyl formate	0248000	2408	625-55-8	Lead stearate	1211000		
Sepropy nitrife 0240003 224 78-82-0 Lead terracetate 1214000 1215000	Isopropyl methyl ketone	0269001	2397	563-80-4	Lead sulfate	1212000	1794	
Sepropy peroxydicarbonate 1189000 119000 2133 Lead thiosynate 1215000 1216000 1216000 1217000 1	Isopropyl nitrate	1188000	1222		Lead sulfide	1213000		
Lead thiosulfate 1216000 1213 Lead thiosulfate 1216000 1216000 1217 1218000 1218000 1218000 1218000 1218000 1218000 1218000 1218000 1218000 1218000 12180000 1218000 1	Isopropyl nitrile	0240003	2284	78-82-0	Lead tetraacetate	1214000		
Sepropyl propionate 19900 249	Isopropyl percarbonate,	1189000			Lead thiocyanate	1215000		
Lentin	Isopropyl peroxydicarbonate	1190000	2133		Lead thiosulfate	1216000		
Sopropylamine 118700	Isopropyl propionate	1191000	2409		Lead tungstate	1217000		
Lewisite 121900 1219 75-31-0 Lewisite 121900 1415 7439-93-2 1439-93-2	Isopropyl-3-methylpyrazolyl				Lentin	0078007		51-83-2
Sopropylbenzene 0246000 1918 98-82-8 Li dane 122000 2761 2749-93-2 27590 2761 27690 27690 2761 27690 27690 27690 2761 27690 27	dimethylcarbamate	1187000			Leptophos	1218000		
Sopropylcyanohydrin 0005003 1541 78-86-5 Lindane 1220000 2761 150	Isopropylamine	0245000	1221	75-31-0	Lewisite	1219000		
Inseed oil 1221000 1	Isopropylbenzene	0246000	1918	98-82-8	Li	0253001	1415	7439-93-2
Sothiocyanic acid, methyl ester 0288001 2477 556-61-6 Sothiourea 0382001 0256-6 Sothiourea 0382001 0250-6 Sothiourea 0382001 0250-6 Sothiourea 0249000 1223 8008-20-6 Sothiourea 0249000 1223 123000 1415 7439-93-2 Sothiourea 025000 1415 7439-93-2 Sothiourea	Isopropylcyanohydrin	0005003	1541	75-86-5	Lindane	1220000	2761	
Southiourea 0382001 62-56-6 Liquefled petroleum gas 0252000 1075 68476-85-7 JP-1	Isopropylidene acetone	1841002	1229	141-79-7	Linseed oil	1221000		
	Isothiocyanic acid, methyl ester	0288001	2477	556-61-6	Liquefied natural gas	0251000	1972	74-82-8
DP-1 D249002 D249003 D249003 D249000 Isothiourea	0382001		62-56-6	Liquefied petroleum gas	0252000	1075	68476-85-7	
Litharge 1222000 1419 7439-93-2 1410 74					Liquid chlorine	0087001	1017	7782-50-5
Kepone 1192000 Lithium 0253000 1415 7439-93-2 Kerosene 0249001 1223 8008-20-6 Lithium aluminum hydride 1223000 1410 7439-93-2 Ketone 0249003 1223 8008-20-6 Lithium bichromate 1224000 1413 124000 Ketene 1193000 2521 674-82-8 Lithium chromate 1226000 1413 144 143 143 144 143 143 143 144 143 144 143 143 1	JP-1	0249002	1223	8008-20-6	Liquid oxygen	0315003		7782-44-7
Kerosene 0249000 1223 8008-20-6 Lithium aluminum hydride 1223000 1410 Kerosine 0249003 1223 8008-20-6 Lithium bichromate 1224000 1413 Ketene 1193000 2521 674-82-8 Lithium borohydride 1225000 1413 Kwik-Kil 0361003 1692 57-24-9 Lithium hydride 1227000 1414 Lacquer 1194000 1263 Lithium metal 0253002 1415 7439-93-2 Lacquer thinner 1195000 1263 Lorsban 0105002 2783 2921-88-2 Lactic acid 1196000 LOX 0315004 7782-44-7 Lactic acid 119700 Luprisol 0345002 1848 79-09-4 Laurjing gas 0311003 10024-97-2 Luprisol 0345002 1848 79-09-4 Lauroyl peroxide 1199000 2124 Magnesium perchlorate 1229000 1475 Lauryl mercaptan 1201000 Magnesium phosphide 123000					Litharge	1222000		
Kerosine 0249003 1223 8008-20-6 Lithium bichromate 1224000 12300 Ketene 1193000 Lithium borohydride 1225000 1413 Ketene dimer 0149003 2521 674-82-8 Lithium chromate 1226000 Kwik-Kil 0361003 1692 57-24-9 Lithium hydride 1227000 1414 Lacquer 1194000 1263 LNG 0253002 1415 7439-93-2 Lacquer thinner 1195000 1263 LNG 0251001 1972 74-82-8 Lactic acid 1196000 1263 LOX 0315004 7782-44-7 Lactic acid 1197000 119700 Luprisol 0345002 1848 79-09-4 Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Lauroyl peroxide 119800 2124 Madone 0116004 1915 108-94-1 Lauryl mercaptan 1201000 2893 Magnesium perchlorate 1229000 1415	Kepone	1192000			Lithium	0253000	1415	7439-93-2
Ketene 1193000 Lithium borohydride 1225000 1413 Ketene dimer 0149003 2521 674-82-8 Lithium chromate 1225000 1414 Kwik-Kil 0361003 1692 57-24-9 Lithium hydride 1227000 1414 Lacquer 1194000 1263 LING 0251001 1972 74-82-8 Lacquer thinner 1195000 1263 Lorsban 0105002 2783 2921-88-2 Lactic acid 1196000 LOX 0315004 7782-44-7 Lactonitrile 025000 3275 78-97-7 LPG 0252002 1075 68476-85-7 Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Lauroyl peroxide 1199000 2124 Madone 0116004 1915 108-94-1 Lauryl mercaptan 1201000 2893 Magnesium perchlorate 1229000 1415 Lead acetate 1203000 1616 Malathion 1231000 2783 <t< td=""><td>Kerosene</td><td>0249000</td><td>1223</td><td>8008-20-6</td><td>Lithium aluminum hydride</td><td>1223000</td><td>1410</td><td></td></t<>	Kerosene	0249000	1223	8008-20-6	Lithium aluminum hydride	1223000	1410	
Ketene dimer 0149003 2521 674-82-8 Lithium chromate 1226000	Kerosine	0249003	1223	8008-20-6	Lithium bichromate	1224000		
Kwik-Kil 0361003 1692 57-24-9 Lithium hydride 1227000 1414 7439-93-2 Lacquer 1194000 1263 Lorsban 0105002 2783 2921-88-2 Lactic acid 1196000 1263 Lox Lox 0315004 7782-44-7 Lactonitrile 0250000 3275 78-97-7 LPG 0252002 1075 68476-85-7 Lasiocarpine 1197000 Luprisol 0345002 1848 79-09-4 Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Laurol peroxide 119900 2124 Madone 0116004 1915 108-94-1 Lauryl mercaptan 1201000 2893 Magnesium perchlorate 1229000 1475 Lead 1202000 4616 Magnesium (powder) 1228000 1418 Lead acetate 1204000 1617 Malathion 1231000 2783 Lead arsenate 1204000 1617 Maleic acid Maleic acid <t< td=""><td>Ketene</td><td>1193000</td><td></td><td></td><td>Lithium borohydride</td><td>1225000</td><td>1413</td><td></td></t<>	Ketene	1193000			Lithium borohydride	1225000	1413	
Lacquer 1194000 1263 LNG 0253002 1415 7439-93-2 Lacquer thinner 1195000 1263 Lorsban 0105002 2783 2921-88-2 Lactic acid 1196000 LOX 0315004 7782-44-7 Lactonitrile 0250000 3275 78-97-7 LPG 0252002 1075 68476-85-7 Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Laurol peroxide 1198000 2124 Madone 0116004 1915 108-94-1 Lauryl mercaptan 1201000 2893 Magnesium perchlorate 1229000 1475 Lead acetate 1203000 1616 Magnesium (powder) 1231000 2783 Lead arsenate 1204000 1616 Malathion 1232000 2215	Ketene dimer	0149003	2521	674-82-8	Lithium chromate	1226000		
Lacquer 1194000 1263 LNG 0251001 1972 74-82-8 Lacquer thinner 1195000 1263 Lorsban 0105002 2783 2921-88-2 Lactic acid 1196000 LOX 0315004 7782-44-7 Lactonitrile 0250000 3275 78-97-7 LPG 0252002 1075 68476-85-7 Lasiocarpine 1197000 Luprisol 0345002 1848 79-09-4 Lauric acid 1198000 Lye 0359004 1310-73-2 Lauroyl peroxide 1199000 2124 Madone 0116004 1915 108-94-1 Lauryl mercaptan 1201000 Magnesium perchlorate 1229000 1475 Lead 1202000 Magnesium (powder) 1228000 1418 Lead acetate 1204000 1616 Malathion 1231000 2783 Lead arsenate 1204000 1617 Maletic acid 1232000 2215	Kwik-Kil	0361003	1692	57-24-9	Lithium hydride	1227000	1414	
Lacquer thinner 1195000 1263 Lorsban 0105002 2783 2921-88-2 Lactic acid 1196000 LOX 0315004 7782-44-7 Lactonitrile 0250000 3275 78-97-7 LPG 0252002 1075 68476-85-7 Lasiocarpine 1197000 Luprisol 0345002 1848 79-09-4 Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Lauroyl peroxide 1198000 Madone 0116004 1915 108-94-1 Lauroyl peroxide (<42%)					Lithium metal	0253002	1415	7439-93-2
Lactic acid 1196000 3275 78-97-7 LPG 0252002 1075 68476-85-7 Lasiocarpine 1197000 Laurghing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Lauroyl peroxide (<42%) 1200000 2893 Magnesium phosphide 1230000 2011 Lead acetate 1203000 1616 Maleic acid 1232000 2783 Lead arsenate 1204000 1617 Maleic acid 1232000 2215	Lacquer	1194000	1263		LNG	0251001	1972	74-82-8
Lactonitrile 0250000 3275 78-97-7 LPG 0252002 1075 68476-85-7 Lasiocarpine 1197000 Luprisol 0345002 1848 79-09-4 Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Lauric acid 1198000 2124 Madone 0116004 1915 108-94-1 Lauroyl peroxide (<42%)	Lacquer thinner	1195000	1263		Lorsban	0105002	2783	2921-88-2
Lasiocarpine 1197000 Luprisol 0345002 1848 79-09-4 Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Lauric acid 1198000 2124 Madone 0116004 1915 108-94-1 Lauroyl peroxide (<42%) 1200000 2893 Magnesium perchlorate 1229000 1475 Lauryl mercaptan 1201000 Magnesium phosphide 1230000 2011 Lead 1202000 Magnesium (powder) 1228000 1418 Lead acetate 1203000 1616 Malathion 1231000 2783 Lead arsenate 1204000 1617 Maleic acid 1232000 2215	Lactic acid	1196000			LOX	0315004		7782-44-7
Laughing gas 0311003 10024-97-2 Lye 0359004 1310-73-2 Lauric acid 1198000 Lauroyl peroxide 1199000 2124 Madone 0116004 1915 108-94-1 Lauroyl peroxide (<42%)	Lactonitrile	0250000	3275	78-97-7	LPG	0252002	1075	68476-85-7
Lauric acid 1198000 Lauroyl peroxide 1199000 2124 Madone 0116004 1915 108-94-1 Lauroyl peroxide (<42%)	Lasiocarpine	1197000			Luprisol	0345002	1848	79-09-4
Lauroyl peroxide 1199000 2124 Madone 0116004 1915 108-94-1 Lauroyl peroxide (<42%)	Laughing gas	0311003		10024-97-2	Lye	0359004		1310-73-2
Lauroyl peroxide (<42%)	Lauric acid	1198000						
Lauryl mercaptan 1201000 Magnesium phosphide 1230000 2011 Lead 1202000 Magnesium (powder) 1228000 1418 Lead acetate 1203000 1616 Malathion 1231000 2783 Lead arsenate 1204000 1617 Maleic acid 1232000 2215	Lauroyl peroxide	1199000	2124		Madone	0116004	1915	108-94-1
Lead 1202000 Magnesium (powder) 1228000 1418 Lead acetate 1203000 1616 Malathion 1231000 2783 Lead arsenate 1204000 1617 Maleic acid 1232000 2215	Lauroyl peroxide (<42%)	1200000	2893		Magnesium perchlorate	1229000	1475	
Lead acetate 1203000 1616 Malathion 1231000 2783 Lead arsenate 1204000 1617 Maleic acid 1232000 2215	Lauryl mercaptan	1201000			Magnesium phosphide	1230000	2011	
Lead arsenate 1204000 1617 Maleic acid 1232000 2215	Lead	1202000			Magnesium (powder)	1228000	1418	
	Lead acetate	1203000	1616		Malathion	1231000	2783	
Lead chloride 1205000 2291 Maleic anhydride 1233000 2215	Lead arsenate	1204000	1617		Maleic acid	1232000	2215	
	Lead chloride	1205000	2291		Maleic anhydride	1233000	2215	

	Chemical	UN	CAS		Chemical	UN	CAS
Chemical Name	ID No.	No.	No.	Chemical Name	ID No.	No.	No.
Maleic hydrazide	1234000			Methacetone	0146004	1156	96-22-0
Malonic acid dinitrile	0254003	2647	109-77-3	Methacrolein diacetate	1258000		
Malonic dinitrile	0254004	2647	109-77-3	Methacrylaldehyde	1259000	2396	
Malonic mononitrile	0108001		372-09-8	Methacrylic acid	0255000	2531	79-41-4
Malononitrile	0254000	2647	109-77-3	Methacrylic acid chloride	0256001		920-46-7
m-Aminopyridine	0023004	2671		Methacrylic anhydride	1260000		
Maneb	1235000	2968		Methacryloyl chloride	0256000		920-46-7
Manganese (dust)	1236000			Methacryloyloxyethyl isocyanate	1261000		
MAOH	0284002	2053	108-11-2	Methaldehyde	0212003		50-00-0
MAPP gas	0262002	1060		Methallyl chloride	1262000		
Marsh gas	0257004		74-82-8	Methamidophos	1263000		
MB	0268004	1062	74-83-9	Methanal	0212004		50-00-0
MBK	0271002	1224	591-78-6	Methane carboxylic acid	1840005		64-19-7
MCB	0093002	1134	108-90-7	Methane sulfonyl chloride	0258000	3246	124-63-0
m-Chloronitrobenzene	0097002	1578		Methane sulfonyl fluoride	0259000		558-25-8
m-Dinitrobenzene	0166004	1597		Methane sulfuryl chloride	0258004	3246	124-63-0
MEA	1824000			Methane trichloride	0096003	1888	67-66-3
MEK	0280003	1193	78-93-3	Methane (compressed gas)	0257000	1971	74-82-8
Melamine	1237000			Methane (cryogenic liquid)	0257001	1972	74-82-8
Melinite	0336002		88-89-1	Methanearsonic acid, sodium salt	1264000		
Mephosfolan	1238000			Methanecarbonitrile	0006004	1648	75-05-8
Mercaptobenzene	0326002	2337	108-98-5	Methanephosphonyl chloride	0293001	9602	676-97-1
Mercaptodimethur	1239000	2784		Methanesulfonic acid chloride	0258003	3246	124-63-0
Mercaptomethane	0289001	1064	74-93-1	Methanethiol	0289002	1064	74-93-1
Mercuric acetate	1240000	1629		Methanoic acid	0214004	1779	64-18-6
Mercuric ammonium chloride	1241000	1630		Methanol	0260000	1230	67-56-1
Mercuric chloride	1242000	1624		Methiocarb	1265000		
Mercuric cyanide	1243000	1636		Methomyl	1266000		
Mercuric iodide	1244000	1638		Methoxycarbonylethylene	0263003	1919	96-33-3
Mercuric nitrate	1245000	1625		Methoxychlor	1268000		
Mercuric oxide	1246000	1641		Methoxyethyl mercuric acetate	1269000		
Mercuric sulfate	1248000	1645		Methoxyethylene	0409001	1087	107-25-5
Mercuric sulfide	1249000			Methoxymethyl isocyanate	1270000	2605	
Mercuric thiocyanate	1250000	1646		Methyl 2-benzimidazole			
Mercurous acetate	1251000	1629		carbamate	1278000		
Mercurous chloride	1252000			Methyl 2-chloroacrylate	0275000		80-63-7
Mercurous nitrate	1253000	1627		Methyl 2-chloropropenoate	0275002		80-63-7
Mercury	1254000	2809		Methyl 2-methyl-2-propenoate	0290003	1247	80-62-6
Mercury oxide	1255000	1641		Methyl acetate	0261000	1231	79-20-9
Mesityl oxide	1841000	1229	141-79-7	Methyl acetic acid	0345003	1848	79-09-4
Mestranol	1256000			Methyl acetic ester	0261002	1231	79-20-9
Mesyl chloride	0258002	3246	124-63-0	Methyl acetoacetate	1271000		
Metaldehyde	1257000	1332		Methyl acetone	1272000	1232	
meta-Xylene	0412005	1307		Methyl acetylene	1273000		

Methyl acetylene-allene mixture 0262003 106	Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Methyl accelyine-propadiene mixture 0262000 105 Methyl socyanate 0285000 245 108-101-11 (24-83) Methyl acryliate 0263000 199 9-833-3 Methyl socyanate 0286000 249 624-83-9 Methyl acryliate 0264000 2307 126-98-7 Methyl sloopropyl ketone 0269002 239 563-80-4 Methyl alcohol 0284003 203 67-56-1 Methyl slothiocyanate 028000 1064 74-93-1 Methyl aryl acetate 1274000 2033 18-11-2 Methyl mercaptorpolenaldehyde 1306000 1064 74-93-1 Methyl arzyl phos 1276000 2783 Methyl mercaptorpolenaldehyde 1306000 1064 74-93-1 Methyl acryl phose 127900 238 Methyl mercaptor 1308000 1064 74-93-1 Methyl acryl phornide 0288000 1662 74-83-9 Methyl methane sulfonate 1308000 1247 56-54-6 Methyl butyl ketone 0271000 1234 591-78-6 Methyl methane sulfonate 1230-00				110.				
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Methyl alcohol 0260002 2130 67-56-1 Methyl kisothiocyanate 028000 247 556-61-6 Methyl amyl aclatete 127400 233 **** Methyl kisothe 0004002 109 67-64-1 Methyl amyl alcohol 0284003 2053 1110 110-43-0 Methyl mercaptoproplonaldehyde 130600 140-74-3 4-93-1 Methyl arzinphos 1276000 2783 *** Methyl mercupy 1308000 147-8 4-93-1 Methyl bromodic 0278000 1022 74-83-9 Methyl mercupy 1308000 140-8 8-6-6-6 Methyl bromodid 0278000 128-8 Methyl methane sulfonate 1309000 140-8 8-6-6-6 Methyl brothend 0278000 128-8 68-8-4 Methyl methane sulfonate 1309000 140-8 9-6-8-4 Methyl koltone 0271000 128-8 68-8-4 Methyl monchloroactate 0281002 247-7 56-6-1-6 Methyl carbyl arind 027500 118-8 148-8-4 Methyl mercaptor 1								
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Methyl disulfide 0156002 2381 624-92-0 Methyl propyl ketone 1326000 1249 Methyl ether 0157001 1033 115-10-6 Methyl rhodanate 0295001 556-64-9 Methyl ethyl ketone 0280000 1193 78-93-3 Methyl salicylate 1328000 Methyl ethyl pyridine 1300000 2300 Methyl syrene 0410001 2618 25013-15-4 Methyl fluoroacetate 1301000 Methyl sulfate 0162001 1595 77-78-1 Methyl formal 1303000 1234 Methyl sulfide 0163003 1164 75-18-3 Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl hydride 0257005 74-82-8 Methyl thiocyanate 0295000 2398 1634-04-4 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 <	Methyl dichloroarsine	1291000	1556		Methyl propionate	1324000	1248	
Methyl ether 0157001 1033 115-10-6 Methyl rhodanate 0295001 556-64-9 Methyl ethyl ketone 0280000 1193 78-93-3 Methyl salicylate 1328000 Methyl ethyl pyridine 1300000 2300 Methyl styrene 0410001 2618 25013-15-4 Methyl fluoroacetate 1301000 Methyl sulfate 0162001 1595 77-78-1 Methyl formal 1302000 Methyl sulfinde 0163003 1164 74-93-1 Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydroxide 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4 <td>Methyl dichloroethanoate</td> <td>0278002</td> <td>2299</td> <td>116-54-1</td> <td>Methyl propyl ether</td> <td>1325000</td> <td>2612</td> <td></td>	Methyl dichloroethanoate	0278002	2299	116-54-1	Methyl propyl ether	1325000	2612	
Methyl ethyl ketone 0280000 1193 78-93-3 Methyl salicylate 1328000 Methyl ethyl pyridine 1300000 2300 Methyl styrene 0410001 2618 25013-15-4 Methyl fluoroacetate 1301000 Methyl sulfate 0162001 1595 77-78-1 Methyl fluorosulfate 1302000 Methyl sulfnydrate 0289003 1064 74-93-1 Methyl formal 1303000 1234 Methyl sulfide 0163003 1164 75-18-3 Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydroxide 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl disulfide	0156002	2381	624-92-0	Methyl propyl ketone	1326000	1249	
Methyl ethyl pyridine 1300000 2300 Methyl styrene 0410001 2618 25013-15-4 Methyl fluoroacetate 1301000 Methyl sulfate 0162001 1595 77-78-1 Methyl fluorosulfate 1302000 Methyl sulfinde 0289003 1064 74-93-1 Methyl formal 1303000 1234 Methyl sulfide 0163003 1164 75-18-3 Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydroide 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl ether	0157001	1033	115-10-6	Methyl rhodanate	0295001		556-64-9
Methyl fluoroacetate 1301000 Methyl sulfate 0162001 1595 77-78-1 Methyl fluorosulfate 1302000 Methyl sulfhydrate 0289003 1064 74-93-1 Methyl formal 1303000 1234 Methyl sulfide 0163003 1164 75-18-3 Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydride 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl ethyl ketone	0280000	1193	78-93-3	Methyl salicylate	1328000		
Methyl fluorosulfate 1302000 Methyl sulfhydrate 0289003 1064 74-93-1 Methyl formal 1303000 1234 Methyl sulfide 0163003 1164 75-18-3 Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydride 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl ethyl pyridine	1300000	2300		Methyl styrene	0410001	2618	25013-15-4
Methyl formal 1303000 1234 Methyl sulfide 0163003 1164 75-18-3 Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydride 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl fluoroacetate	1301000			Methyl sulfate	0162001	1595	77-78-1
Methyl formate 0281000 1243 107-31-3 Methyl sulfocyanate 0295002 556-64-9 Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydride 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl fluorosulfate	1302000			Methyl sulfhydrate	0289003	1064	74-93-1
Methyl heptyl ketone 1304000 Methyl tert-butyl ether 0270000 2398 1634-04-4 Methyl hydride 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl formal	1303000	1234		Methyl sulfide	0163003	1164	75-18-3
Methyl hydride 0257005 74-82-8 Methyl thiocyanate 0295000 556-64-9 Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl formate	0281000	1243	107-31-3	Methyl sulfocyanate	0295002		556-64-9
Methyl hydroxide 0260003 1230 67-56-1 Methyl vinyl ether 0409003 1087 107-25-5 Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl heptyl ketone	1304000			Methyl tert-butyl ether	0270000	2398	1634-04-4
Methyl iodide 0283000 2644 74-88-4 Methyl vinyl ketone 0297000 1251 78-94-4	Methyl hydride	0257005		74-82-8	Methyl thiocyanate	0295000		556-64-9
	Methyl hydroxide	0260003	1230	67-56-1	Methyl vinyl ether	0409003	1087	107-25-5
Methyl isobutenyl ketone 1841003 1229 141-79-7 Methyl zinc 0164001 1370 544-97-8	Methyl iodide	0283000	2644	74-88-4	Methyl vinyl ketone	0297000	1251	78-94-4
	Methyl isobutenyl ketone	1841003	1229	141-79-7	Methyl zinc	0164001	1370	544-97-8

Methylacryl chloride	Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Methyfarine fearlydrous 0212005 026500 1264 74-95-5 MIC 0286007 1265	Methylacryl chloride	0256002		920-46-7	MIBC	0284005	2053	108-11-2
Methylamine (anhydrous) 0.265000 0.265 74-89-5 Michler's ketone 1335000 1241 75-58-8 Michler's ketone 1335000 1241 75-58-8 Michler's ketone 1335000 1241 75-58-8 Michler's ketone 1335000 1241 71-43-2 Methylbenzole 0.384001 1242 108-88-3 Mineral naphtha 0.039004 114 71-43-2 Methylchorform 0.389003 2831 71-55-6 Mineral naphtha 0.039004 1242 0.038-006 0.038-007 0.					MIBK	1830000		
Methylamine (solution)	• •		1061		MIC	0286003	2480	624-83-9
Methylbenzene 0384001 1294 108-88-3 Mineral naphtha 0039004 114 71-43-2 Methylbenzene 0384002 2294 108-88-3 Mineral oil 1337000 3000-0-6 Methylcyclopentane 0276000 2296 108-87-2 Mineral spirits 0299002 239 563-80-4 Methylcyclopentane 0277001 2298 96-37-7 MIPK 0269004 2397 563-80-4 Methylcelobentane 0279000 127 75-54-7 Mirchane oil 1842004 1662 98-95-3 Methylene acetone 0297002 1251 78-94-4 Mirc 028800 2477 556-61-6 Methylene bis-(phenyl 129400 2489 MIRC 029000 124 75-69-2 MIRC 028000 2477 556-61-6 Methylene bromide 0122000 2489 MME 0290004 1244 06-2-6 Methylene cyanolydrin 0125000 259-75-9-2 MIRC 0271003 1224 69-34-4 Met					Michler's ketone	1336000		
Methylchicrofrom	Methylaziridine	0352001	1921	75-55-8	MIK	0285004	1245	108-10-1
Methylchloroform 038903 2831 71-55-6 Mineral spirits 0299002 8030-30-6 Methylcyclopexnane 0276000 2298 168-87-2 Miosat 0276008 51-83-2 Methylcyclopexnane 0277001 2298 63-37-7 MIPK 0269004 2397 658-80-4 Methylene 035001 1077 115-07-1 Mirex 1338000 2477 556-61-6 Methylene acetone 0297002 1251 78-94-4 MIT 0288003 2477 556-61-6 Methylene bichloride 0132001 1593 75-99-2 MITC 0288003 2478 556-61-6 Methylene bichloride 0126001 268 7-9-3 MMR 0290004 1247 69-62-6 Methylene bromide 0126002 2684 7-95-3 MMH 0282003 1244 69-17-8-6 Methylene cyanide 0254005 2647 109-77-3 m-Nitrophenol 1394000 1663 Methylene dibroride 0123005 107-16-4	Methylbenzene	0384001	1294	108-88-3	Mineral naphtha	0039004	1114	71-43-2
Methylcyclopentane	Methylbenzol	0384002	1294	108-88-3	Mineral oil	1337000		
Methyloyciopentane 0277011 2298 96-37-7 MIPK 0269004 2397 563-80-4 Methylene 035001 1077 15-54-7 Michane oil 1842004 1662 98-95-3 Methylene 035001 1251 78-94-4 MIT 0288003 2477 56-61-6 Methylene bis-Chenyl 1593 75-99-2 MITC 0288004 2478 56-61-6 Methylene bis-Chenyl 1294000 2489 MMA 1832000 1247 56-61-6 Methylene bis-Chenyl 1294000 2489 MME 0282003 1244 69-34-4 Methylene chiloride 0132002 1593 75-99-2 MMBK 0271003 1224 59-17-8-6 Methylene cyanolydrin 0213005 2647 199-73-3 m-Nitrotluene 031000 1663 78-24-4 Methylene dilbromide 0126002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene dilbromide 0132003 1593 75-09-2 <td< td=""><td>Methylchloroform</td><td>0389003</td><td>2831</td><td>71-55-6</td><td>Mineral spirits</td><td>0299002</td><td></td><td>8030-30-6</td></td<>	Methylchloroform	0389003	2831	71-55-6	Mineral spirits	0299002		8030-30-6
Methyldichlorosilane 0279000 1242 75-54-7 Mirobane oil 1842004 1662 98-95-3 Methylene 0350001 1077 115-07-1 Mirex 1338000 2477 556-61-6 Methylene bichloride 013200 1293 75-09-2 MITC 0288004 2477 556-61-6 Methylene bichloride 0126001 2664 74-95-3 MMB 0290004 1247 80-62-6 Methylene bromide 0126001 2664 74-95-3 MMB 0282003 1224 69-34-8 Methylene cyanide 0254005 2647 109-77-3 m-Nitroblenol 1394000 1663 Methylene dibromide 0125002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene dibromide 0125002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene dibrovale 0125002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene oxide 0132003 1593 <td>Methylcyclohexane</td> <td>0276000</td> <td>2296</td> <td>108-87-2</td> <td>Miostat</td> <td>0078008</td> <td></td> <td>51-83-2</td>	Methylcyclohexane	0276000	2296	108-87-2	Miostat	0078008		51-83-2
Methylene 0350001 1077 115-07-1 Mirex 1338000 247 566-61-6 Methylene acetone 0297002 1251 78-94-4 MIT 0288003 247 566-61-6 Methylene bichloride 0132001 1593 75-09-2 MITC 0288004 247 566-61-6 Methylene bromide 0126001 2664 74-95-3 MMB 0290004 1247 06-62-6 Methylene chinide 0132002 1593 75-09-2 MNBK 0271003 1224 69-34-4 Methylene cyanide 0254005 2647 190-77-3 m-Nitrophenol 1394000 1663 Methylene dibromide 0125002 2647 190-77-3 m-Nitrophenol 0310001 1664 Methylene dibromide 0125002 2647 190-77-3 Molecular oxygen 0310001 1664 Methylene dibromide 0125002 2647 49-5-3 Molecular oxygen 0316005 7782-44-7 Methylene dibromide 0125002 2707 15-0-1 <td>Methylcyclopentane</td> <td>0277001</td> <td>2298</td> <td>96-37-7</td> <td>MIPK</td> <td>0269004</td> <td>2397</td> <td>563-80-4</td>	Methylcyclopentane	0277001	2298	96-37-7	MIPK	0269004	2397	563-80-4
Methylene acetone 0297002 1251 78-94-4 MIT 0288003 2477 556-61-6 Methylene bischloride 0132001 1593 75-09-2 MITC 0288004 2477 556-61-6 Methylene bischloride 1294000 2489 MME 0290004 1247 80-62-6 Methylene bromide 0126001 2664 74-95-3 MMH 0282003 1244 60-34-4 Methylene cyanide 0254005 2647 199-77-3 m-Nitrophenol 1394000 1663 Methylene dibromide 0123005 107-16-4 m-Nitrotoluene 0310001 1664 Methylene dibromide 0132003 1593 75-09-2 Molecular oxygen 0315005 7782-44-7 Methylene dibromide 0132003 1593 75-09-2 Molten phosphorous 0315005 7782-44-7 Methylene oxide 012006 50-00-0 Monoallylamine 0180003 2334 107-11-9 Methylene oxide 0212006 50-00-0 Monoachlorotethane 0183002	Methyldichlorosilane	0279000	1242	75-54-7	Mirbane oil	1842004	1662	98-95-3
Methylene bichloride 0132001 1593 75-09-2 MITC 0288004 2477 55-61-61-68 Mettylene bis-(phenyl scyanate) (or MBI) 1294000 2489 MME 0290001 1247 80-62-6 Mettylene bromide 0126001 2664 74-95-3 MMH 0280003 1244 60-34-4 Mettylene cloride 0123002 1593 75-09-2 MNBK 0271003 1224 59-78-6 Mettylene cyanide 0254005 2647 109-77-3 m-Nitrophenol 1394000 1663 Mettylene dichloride 0126002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Mettylene dichloride 0123003 1593 75-09-2 Molten phosphorous 0315005 7782-44-7 Mettylene dichloride 012006 50-00-0 Monocallylamine 018000 2772-14-0 Mettylene oxide 0212006 50-00-0 Monocallylamine 018000 1077 115-07-1 Monocallylamine 018000 1077 107-11-9 M	Methylene	0350001	1077	115-07-1	Mirex	1338000		
Methylene bis-(phenyl isocyanate) (or MBI) 1294000 2489 bisocyanate) (or MBI) MMA 1832000 1247 bisocyanate (or MBI) 80-62-6 MME 0290004 bisocyanate (or MBI) 80-62-6 Methylene bromide 0126001 bisocyanate (or MBI) 40-62-6 MMH 0282003 bisocyanate (or MBI) 80-62-6 Methylene cyanide (or MBI) 40-34-4 MMH 0282003 bisocyanate (or MBI) 40-34-4 MMBK 027103 bisocyanate (or MBI) 40-34-8 MMH 0282003 bisocyanate (or MBI) 40-34-8 MMH 0282003 bisocyanate (or MBI) 40-34-8 Methylene dishoride 0132003 bisocyanate (or MBI) 107-16-4 m-Nitrotoluene (or MI) bisocyanate (or MBI) 0130003 bisocyanate (or MBI) 7782-44-7 Methylene dishoride 0132003 bisocyanate (or MBI) 77-09-2 Molecular oxygen (or MBI) 0315005 bisocyanate (or MBI) 77-23-14-0 Methylene dishoride 0132003 bisocyanate (or MBI) 77-09-2 Molten phosphorous (or MBI) 0313003 bisocyanate (or MBI) 77-23-14-0 Methylene dishoride 0132003 bisocyanate (or MBI) 1340000 bisocyanate (or MBI) Methylene dishoride 0132003 bisocyanate (or MBI) 1340000 bisocyanate (or MBI) Methylene dishoride 032000 bisocyanate (or MBI) 134-1000 bisocyana	Methylene acetone	0297002	1251	78-94-4	MIT	0288003	2477	556-61-6
isocyanate) (or MBI) 1294000 2488 MME 0290004 1247 80-62-6 Methylene bromide 0126001 2664 74-95-3 MMH 0282003 1244 60-34-4 Methylene chloride 0132002 1593 75-09-2 MNBK 0271003 1224 591-78-6 Methylene cyanohydrin 0254005 2647 19-77-3 m-Nitrobluene 0310001 1663 Methylene didhoride 0126002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene didhoride 0132003 1593 75-09-2 Molten phosphorous 0331003 7723-14-0 Methylene oxide 0212006 50-00-0 Monoallylamine 0018003 2334 107-11-9 Methylethylene oxide 0212006 50-00-0 Monoallylamine 0018003 2334 107-11-9 Methylethylamine 1297000 115-07-1 Monochlorethane 0183002 1037 75-03 Methylylndrazine 0282000 1244 60-34-4 Monochlorotetha	Methylene bichloride	0132001	1593	75-09-2	MITC	0288004	2477	556-61-6
Methylene bromide 0126001 2664 74-95-3 MMH 0282003 1244 60-34-4 Methylene bromide 0132002 1593 75-09-2 MNBK 0271003 1224 591-78-6 Methylene cyanide 0254005 2647 109-77-3 m-Nitrophenol 1394000 1663 Methylene diloroide 0126002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene diloroide 0132003 1593 75-09-2 Molecular oxygen 0315005 7782-44-7 Methylene didisocyanate 1296000 Molybdinum trioxide 1340000 7723-14-0 Methylene oxide 0212006 50-00-0 Monoallylamine 018003 233 107-11-9 Methylethylene 035002 1077 115-07-1 Monochlorotehane 0183002 107 75-0-3 Methylethyleridene 0282000 1244 60-34-4 Monochlorotehylene 0093003 113 109-73-9 Methylethylydrazine 028200 1237 623-42-7	Methylene bis-(phenyl				MMA	1832000		
Methylene chloride 0132002 1593 75-09-2 MNBK 0271003 1224 591-78-6 Methylene cloride 0254005 2647 109-77-3 m-Nitrophenol 1394000 1663 Methylene cyanohydrin 0213005 107-16-4 m-Nitrobluene 0310001 1664 Methylene dibromide 0132003 1593 75-09-2 Molecular oxygen 0315005 7782-44-7 Methylene dibromide 0132003 1593 75-09-2 Molten phosphorous 0331003 7723-14-0 Methylene dilsocyanate 1296000 Molten phosphorous 0331003 7723-14-0 Methylene dilsocyanate 1296000 Monochlorothylamine 018003 2334 107-11-9 Methylene disocyanate 1296000 115-07-1 Monochlorothylamine 008003 1232 107-11-9 Methylene disocyanate 0212002 1237 115-07-1 Monochlorothylamine 008003 1125 109-73-9 Methylene disocyanate 0282000 1244 60-34-4 Monochlorothylamine 018003 </td <td>isocyanate) (or MBI)</td> <td></td> <td>2489</td> <td></td> <td></td> <td></td> <td></td> <td></td>	isocyanate) (or MBI)		2489					
Methylene cyanide 0254005 2647 109-77-3 m-Nitrophenol 1394000 1663 Methylene cyanohydrin 0213005 107-16-4 m-Nitrotoluene 0310001 1664 Methylene dibromide 0126002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene disocyanate 1296000 Molybdinum trioxide 1340000 7723-14-0 Methylene oxide 0212006 50-00-0 Monoallylamine 0018003 233 107-11-9 Methylethylamine 1297000 Monobutylamine 0064003 1125 109-73-9 Methylethylamine 0350002 1077 115-07-1 Monochlorethane 0183002 103 75-09-3 Methylinydrazine 0282000 1244 60-34-4 Monochlorobenzene 0093003 1134 108-90-7 Methylenthane 0173004 72-84-0 Monochloromethane 0273004 1063 74-87-3 Methylentamethylene 0250004 1230 675-56-1 Monochloromethane 1341000 108-72-72-72-72	Methylene bromide	0126001	2664	74-95-3				
Methylene dibromide 0213005 107-16-4 m-Nitrotoluene 0310001 1664 Methylene dibromide 0126002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene dichloride 0132003 1593 75-09-2 Molten phosphorous 0331003 7723-14-0 Methylene diisocyanate 1296000 Molybdinum trioxide 1340000 234 107-11-9 Methylethylamine 1297000 Monoblydamine 0064003 125 109-73-9 Methylethylaraine 0350002 1077 115-07-1 Monochlorethane 0183002 103 75-00-3 Methylethylaraine 0282000 1244 60-34-4 Monochlorethane 0983003 1134 108-90-7 Methyloriane 0173004 74-84-0 Monochlorotetrafluoroethane 093003 134 108-90-7 Methyloriane 0353003 1280 75-56-9 Monochlorotetrafluoroethane 1341000 1344000 Methylpientaine 1332000 2462 Monochlorotetrafluoroethane 1344000	Methylene chloride	0132002	1593					591-78-6
Methylene dibromide 0126002 2664 74-95-3 Molecular oxygen 0315005 7782-44-7 Methylene dibroride 0132003 1593 75-09-2 Molten phosphorous 0331003 7723-14-0 Methylene diisocyanate 1296000 Molten phosphorous 0331003 2334 107-11-9 Methylene oxide 0212006 50-00-0 Monoallylamine 0018003 2334 107-11-9 Methylethylamine 1297000 Monobutylamine 0064003 1125 109-73-9 Methylethylene 0350002 1077 115-07-1 Monochlorethane 0183002 1037 75-00-3 Methylethylene 0282000 1244 60-34-4 Monochloroethylene 0045003 136 75-01-4 Methylen-butanoate 0272002 1237 623-42-7 Monochloroethylene 0405003 1063 74-87-3 Methyloixirane 0353003 1280 67-56-9 Monochlorotetrafluoroethane 1344000 Monochloroethylamine 1342000 Monochloroethylamine 1342000 Monochloroethyl	• •		2647	109-77-3	•			
Mettrylene dichloride 1132003 1593 75-09-2 Molten phosphorous 0331003 7723-14-0 Methylene diisocyanate 1296000 50-00-0 Molybdinum trioxide 1340000 1340000 Methylene oxide 0212006 50-00-0 Monoallylamine 0018003 2334 107-11-9 Mettrylethylamine 1297000 115-07-1 Monochlorothane 0183002 1037 75-00-3 Mettrylethylydrazine 0282000 1244 60-34-4 Monochlorothane 093003 1134 108-90-7 Mettrylol 0173004 74-84-0 Monochlorothylene 0093003 1136 75-01-4 Mettrylol 0260004 1230 67-56-1 Monochlorotetrafluorothane 1341000 1063 74-87-3 Mettrylopentame thylene 0277002 2298 96-37-7 Monochlorotetrafluorothane 1342000 141-43-5 Mettrylipentamethylene 1322000 239 Monochlorotetrafluorothane 1344000 141-43-5 Mettrylitetrahydrofuran 1329000 253 Monochl				107-16-4			1664	
Methylene diisocyanate 1296000 Formation of the thylene oxide Molybdinum trioxide 1340000 3234 107-11-9 Methylene oxide 0212006 50-00-0 Monoallylamine 0018003 2334 107-11-9 Methylethylamine 1297000 Monobutylamine 0064003 1125 109-73-9 Methylethylene 0350002 1277 115-07-1 Monochlorethane 0183002 1037 75-00-3 Methylmethane 0173004 74-84-0 Monochloroethylene 0405003 1086 75-01-4 Methyln-n-butanoate 0272002 1237 623-42-7 Monochlorotetrafluoroethane 0273004 1063 74-87-3 Methyloi 0260004 1230 67-56-1 Monochlorotetrafluoroethane 1341000 74-87-3 Methylpentamethylene 0277002 2298 96-37-7 Monochlorotetrafluoroethane 1342000 141-43-5 Methylpentamethylene 132000 2536 Monochlorotethylamine 0174003 2491 141-43-5 Methyltrichloroforacetate 133000	·							
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Methylethylamine 1297000 Honobutylamine 0064003 1125 109-73-9 Methylethylene 0350002 1077 115-07-1 Monochlorethane 0183002 1037 75-00-3 Methylhydrazine 0282000 1244 60-34-4 Monochlorobenzene 0093003 1134 108-90-7 Methylmethane 0173004 74-84-0 Monochlorobenzene 0405003 1086 75-01-4 Methylol 0260004 1230 623-42-7 Monochlorobenzene 0273004 1063 74-87-3 Methylol 0260004 1230 67-56-1 Monochlorobenzene 1341000 1063 74-87-3 Methyloxirane 0353003 1280 75-56-9 Monochlorobenzene 1342000 1342000 1342000 1342000 1344000 14-43-5 Methylpipentane 1343000 14-43-5 Monochlylamine 0174003 2491 141-43-5 141-43-5 Methyltichlorosetate 133000 253 Monochlylamine 0178004 1036 75-04-7 Monofluorobenzene <td< td=""><td>•</td><td></td><td></td><td></td><td>, in the second</td><td></td><td>•••</td><td></td></td<>	•				, in the second		•••	
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Methyltrichloroacetate 1330000 2533 Monoethyldichlorosilane 0187002 1183 1789-58-8 Methyltrichloromethane 0389004 2831 71-55-6 Monofluoroacetate 0208005 2642 144-49-0 Methyltrichlorosilane 0296000 1250 75-79-6 Monofluorobenzene 0209003 2387 462-06-6 Metolachlor 1332000 Monofluoroethene 0407004 1860 75-02-5 Metolcarb 1333000 Monoisopropanolamine 0243004 78-96-6 Mevinphos 1334000 2783 Monomethylamine 0265001 1061 74-89-5 Mexacarbate 1335000 2757 Monomethylhydrazine 0282004 1244 60-34-4 MFA 0208004 2642 144-49-0 Morpholine 0298000 2054 110-91-8 MFB 0209002 2387 462-06-6 Motor fuel 0217002 1203 8006-61-9								
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Methyltrichlorosilane 0296000 1250 75-79-6 Monofluorobenzene 0209003 2387 462-06-6 Metolachlor 1332000 Monofluoroethene 0407004 1860 75-02-5 Metolcarb 1333000 Monoisopropanolamine 0243004 78-96-6 Mevinphos 1334000 2783 Monomethylamine 0265001 1061 74-89-5 Mexacarbate 1335000 2757 Monomethylhydrazine 0282004 1244 60-34-4 MFA 0208004 2642 144-49-0 Morpholine 0298000 2054 110-91-8 MFB 0209002 2387 462-06-6 Motor fuel 0217002 1203 8006-61-9	•			71-55-6	,		2642	144-49-0
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Metolcarb 1333000 Monoisopropanolamine 0243004 78-96-6 Mevinphos 1334000 2783 Monomethylamine 0265001 1061 74-89-5 Mexacarbate 1335000 2757 Monomethylhydrazine 0282004 1244 60-34-4 MFA 0208004 2642 144-49-0 Morpholine 0298000 2054 110-91-8 MFB 0209002 2387 462-06-6 Motor fuel 0217002 1203 8006-61-9	•				Monofluoroethene	0407004	1860	75-02-5
Mevinphos 1334000 2783 Monomethylamine 0265001 1061 74-89-5 Mexacarbate 1335000 2757 Monomethylhydrazine 0282004 1244 60-34-4 MFA 0208004 2642 144-49-0 Morpholine 0298000 2054 110-91-8 MFB 0209002 2387 462-06-6 Motor fuel 0217002 1203 8006-61-9	Metolcarb				Monoisopropanolamine	0243004		78-96-6
MFA 0208004 2642 144-49-0 Morpholine 0298000 2054 110-91-8 MFB 0209002 2387 462-06-6 Motor fuel 0217002 1203 8006-61-9	Mevinphos		2783		Monomethylamine	0265001	1061	74-89-5
MFB 0209002 2387 462-06-6 Motorfuel 0217002 1203 8006-61-9	Mexacarbate	1335000	2757		Monomethylhydrazine	0282004	1244	60-34-4
	MFA	0208004	2642	144-49-0	Morpholine	0298000	2054	110-91-8
Motor spirit 0217003 1203 8006-61-9	MFB	0209002	2387	462-06-6	Motor fuel	0217002	1203	8006-61-9
					Motor spirit	0217003	1203	8006-61-9

0	Chemical	UN	CAS		Chemical	UN	CAS
Chemical Name	ID No.	No.	No.	Chemical Name	ID No.	No.	No.
Mous-con	0413001	1714		n-Amyl nitrate	0492000	1113	
Mouse-Rid	0361004	1692	57-24-9	n-Amyl nitrite	0493000		
MPTD	0294002	1760	676-98-2	Naphtha	0299000		8030-30-6
MSF	0259002		558-25-8	Naphtha: coal tar	1351000	2553	
MTBE	0270003	2398	1634-04-4	Naphtha: stoddard solvent	1352000	1271	
m-Toluidine	0387002	1708		Naphtha: VM & P	1353000		
Muriatic acid	1827000			Naphthalene	1354000	1334	
Muriatic ether	0183003	1037	75-00-3	Napthylthiourea	1356000	1651	
Mustard gas	1345000			Napthylurea	1357000	1652	
Muster	0218001		1071-83-6	Naramycin	0117003		66-81-9
MVK	0297003	1251	78-94-4	Natural gas	1829000		
MVP (2-Methyl-5-vinyl pyridine)	1346000	3073		Naturium	0356000	1428	7440-23-5
m-Xylene	0412004	1307		n-Butane	0060001	1011	106-97-8
m-Xylene	0412009	1307		n-Butanol	0603000	1120	
Myrcene	1347000			n-Butene	0066003	1012	25167-67-3
				n-Butyl acetate	0061000	1123	123-86-4
N-(2-chlorophenylthiourea)	0098001		5344-82-1	n-Butyl acrylate	0062002	2348	141-32-2
N-(2-methylphenyl) thiourea	0292000		614-78-8	n-Butyl alcohol	0609000	1120	
N,N'-bis(2-aminoethyl)-				n-Butyl bromide	0056002	1126	109-65-9
1,2-ethanediamine	0393001	2259	112-24-3	n-Butyl carbinol	0032004	1105	71-41-0
N,N'-Diacetyl benzidine	0827000			n-Butyl chloroformate	0616000	2743	
N,N'-diacetyl benzidine	0843000			n-Butyl isocyanate	0069000	2485	111-36-4
N,N'-Dibutyl hexamethylene				n-Butyl mercaptan	0070003	2347	109-79-5
diamine	0856000			n-Butyl methacrylate	0622000	2227	
N,N'-dibutyl hexamethylene				n-Butylamine	0064000	1125	109-73-9
diamine	0881000			n-Butylaniline	0612000	2738	
N,N-diethyl aniline	0890000	2432		n-Butylchloride	0094002	1127	109-69-3
N,N'-diethylaniline	1069000			n-Butylene	0066005	1012	25167-67-3
N,N-diethylethanamine	0392002	1296	121-44-8	n-Butyric acid	0631000	2820	
N,N-dimethyl carbamoyl chloride	0154005	2262	79-44-7	n-Decyl acrylate	0817000		
N,N-dimethyl cyclohexylamine	1837000			n-Decyl alcohol	0818000		
N,N-dimethyl formamide	0158003	2265	68-12-2	n-Decyl benzene	0819000		
N,N-dimethylacetamide	0151003		127-19-5	n-Dipropylamine	0170002	2383	142-84-7
N,N-dimethylaniline	0153000	2253	121-69-7	Nemex	0135005	2047	542-75-6
N,N-dimethyl-p-phenylenediamine	0160000		99-98-9	Neodecanoic acid	1358000		
Nabam	1348000			Neohexane	0300000	1208	75-83-2
Nafenopin	1349000			Neon	1359000	1065	
Naled	1350000			Neoprene	0100005	1991	126-99-8
N-aminoethyl piperazine	0443000	2815		N-ethyl butylamine	0181002	2734	13360-63-9
N-aminoethyl piperazine	0450000			N-ethyl cyclohexylamine	1039000		
n-Amyl acetate	0488000	1104		N-ethylaniline	1028000	2272	
n-Amyl alcohol	0032001	1105	71-41-0	N-ethylbutylamine	0181003	2734	13360-63-9
n-Amyl chloride	0490000	1111		N-formyldimethylamine	0158004	2265	68-12-2
n-Amyl mercaptan	0491000	1112		n-Heptane	0219001	1206	142-82-5
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Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
n-Heptene	0220000	2278	592-76-7	Nitrogen gas	0304002		7727-37-9
n-Hexaldehyde	1146000	1207		Nitrogen liquid	0304003		7727-37-9
n-Hexane	0221002	1208	110-54-3	Nitrogen monoxide	0303002	1660	10102-43-9
Nickel	1360000	2881		Nitrogen mustard	1389000		
Nickel acetate	1361000			Nitrogen mustard hydrochloride	1390000		
Nickel ammonium sulfate	1362000	9138		Nitrogen mustard N-oxide	1391000		
Nickel bromide	1363000			Nitrogen mustard N-oxide			
Nickel carbonyl	0301000	1259	13463-39-3	hydrochloride	1392000		
Nickel chloride	1364000			Nitrogen oxide	0303004		
Nickel cyanide	1365000	1653		Nitrogen oxychloride	0309002	1069	2696-92-6
Nickel fluoroborate	1366000			Nitrogen tetroxide	0305002	1067	10102-44-0
Nickel formate	1367000			Nitrogen trifluoride	1393000	2451	
Nickel hydroxide	1368000	9140		Nitrogen (compressed gas)	0304000	1066	7727-37-9
Nickel nitrate	1369000	2725		Nitrogen (refrigerated liquid)	0304001	1977	7727-37-9
Nickel subsulfide	1370000			Nitroglycerin	0306000	0143	55-63-0
Nickel sulfate	1371000			Nitroglycerin (1-10% solution in			
Nickel tetracarbonyl	0301001	1259	13463-39-3	alcohol)	0306001	0144	55-63-0
Nicotine	1372000	1654		Nitromethane	0307000	1261	75-52-5
Nicotine sulfate	1373000	1658		Nitrophen	0168007		51-28-5
Nitrador	0167004	1598	534-52-1	Nitropropane	0308000	2608	
Nitralin	1374000			Nitro-Sil	0024004	1005	7664-41-7
Nitric acid (fuming)	0302000	2032	7697-37-2	Nitrostarch (dry or wetted with			
Nitric acid (nonfuming, >40%)	0302001	2031	7697-37-2	<20% water)	1403000	0146	
Nitric oxide	0303000	1660	10102-43-9	Nitrostarch (wetted with >20%			
Nitric oxide (mixture with nitrogen				water)	1404000	1337	
tetroxide)	0303001	1975	10102-43-9	Nitrosyl chloride	0309000	1069	2696-92-6
Nitrilotriacetic acid	1375000			Nitrosylsulfuric acid	1405000	2308	
Nitrilotriacetic acid, disodium salt	1376000			Nitrotoluene	0310000	1664	
Nitrilotriacetic acid, sodium salt	1377000			Nitrous acid, ethyl ester	0203002	1194	109-95-5
Nitrilotriacetic acid, trisodium salt	1378000			Nitrous oxide (compressed gas)	0311000	1070	10024-97-2
Nitrobenzene	1842000	1662	98-95-3	Nitrous oxide (cryogenic liquid)	0311001	2201	10024-97-2
Nitrobenzol	1842002	1662	98-95-3	N-methylaniline	1275000	2294	
Nitrocarbol	0307001		75-52-5	N-methylaniline	1285000		
Nitrocellulose (with >25% Water)	1383000	2555		N-methyl-methanamine	0152001	1032	124-40-3
Nitrocellulose (with plasticizer > 18%)	1384000	0343		N-nitrosodiethanolamine	1406000		
Nitrochlorobenzene	0097005	1578		N-nitrosodiethylamine	1407000		
Nitrochloroform	0099001	1580	76-06-2	N-nitrosodimethylamine	1408000		
Nitrocresols	1385000	2446		N-nitrosodi-n-butylamine	1409000		
Nitrocyclohexane	1386000			N-nitrosodi-n-propylamine	1410000		
Nitroethane	1387000	2842		N-nitrosodiphenylamine	1411000		
Nitrofan	0167005	1598	534-52-1	N-nitrosomethylethylamine	1412000		
Nitrofen	1388000			N-nitrosomethylvinylamine	1413000		
Nitrogen chloride oxide	0309001	1069	2696-92-6	N-nitrosomorpholine	1414000		
Nitrogen dioxide	0305000	1067	10102-44-0	N-nitroso-N-ethyl urea	1415000		

N-nitroso-N-methyl urethane 1417000	7664-93-9 141-43-5
N-nitrosonomicotine	141-43-5
N-nitrosonomicotine 1418000 Oleic acid 1434000 Idade in the control of the contr	
N-nitrosopyrrolidine 1420000 Oleic acid, sodium salt 1436000 N-nitrososarcosine 1421000 Oleum 0314000 1831 8 NO 0303003 1660 10102-43-9 o-Nitrobenzene 1842005 1662 9 n-Octane 0312001 1262 111-65-9 o-Nitrophenol 1395000 1663 Nonane 1422000 1920 o-Nitrophenol 1433000 1664 Nonene 1424000 2057 o-Phenyl phenate, sodium 1470000 147000 Norylphenol 1425000 o-Phenyl phenol 1471000 1471000 1471000 1471000 Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 1438000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 150900 Orvinylecarbinol 001	
N-nitrososarcosine 1421000 Oleum 0314000 1831 8 NO 0303003 1660 10102-43-9 o-Nitrobenzene 1842005 1662 9 n-Octane 0312001 1262 111-65-9 o-Nitrophenol 1395000 1663 1831 18 Nonane 1422000 1920 o-Nitrophenol 1433000 1663 1831 18 16 18	
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n-Octane 0312001 1262 111-65-9 o-Nitrophenol 1395000 1663 Nonane 1422000 1920 o-Nitrophenol 1433000 o-Nitrophenol 1433000 Nonanol 1423000 o-Nitrotoluene 0310005 1664 Nonene 1424000 2057 o-Phenyl phenate, sodium 1470000 Norylphenol 1425000 o-Phenyl phenate, sodium 1476000 Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	3014-95-7
Nonane 1422000 1920 o-Nitrophenol 1433000 Nonanol 1423000 o-Nitrotoluene 0310005 1664 Nonene 1424000 2057 o-Phenyl phenate, sodium 1470000 Nonylphenol 1425000 o-Phenyl phenate, sodium 1476000 Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	98-95-3
Nonanol 1423000 o-Nitrotoluene 0310005 1664 Nonene 1424000 2057 o-Phenyl phenate, sodium 1470000 Nonylphenol 1425000 o-Phenyl phenate, sodium 1476000 Norbormide 1426000 o-Phenyl phenol 1471000 Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
Nonene 1424000 2057 o-Phenyl phenate, sodium 1470000 Nonylphenol 1425000 o-Phenyl phenate, sodium 1476000 Norbormide 1426000 o-Phenyl phenol 1471000 Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
Nonylphenol 1425000 o-Phenyl phenate, sodium 1476000 Norbormide 1426000 o-Phenyl phenol 1471000 Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
Norbormide 1426000 o-Phenyl phenol 1471000 Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
Norethisterone 0037004 2188 7784-42-1 o-Phenyl phenol 1477000 n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
n-Pentane 0321001 1265 109-66-0 Orange oil SS 1437000 N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
N-phenylthiourea 0328001 2767 103-85-5 Ordram (or molinate) 1438000 N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
N-phosphonomethylglycine 0218002 1071-83-6 ortho-Xylene 0412006 1307 N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
N-propanolamine 1509000 Orvinylecarbinol 0017004 1098 1	
N proposition 1520000 0274	107-18-6
N-propanolamine 1529000 Osmium tetroxide 1439000 2471	
n-Propyl acetate 0347000 1276 109-60-4 o-Toluidine 0387003 1708	
n-Propyl benzene 0348000 2364 103-65-1 o-Tolyl thiourea 0292002 6	614-78-8
n-Propyl chloroformate 0349000 2740 109-61-5 Oxacyclopentadiene 0215002 2389 1	110-00-9
n-Propyl mercaptan 0342003 2402 107-03-9 Oxacyclopentane 0379003 2056 1	109-99-9
n-Propyl nitrate 1543000 1865 Oxalic acid 1440000	
n-Undecylbenzene 1757000 Oxalonitrile 0109005 1026 4	460-19-5
n-Undecylbenzene 1762000 Oxalyl cyanide 0109006 1026 4	460-19-5
Oxammonium 0235001 7	7803-49-8
o-Aminopyridine 0023005 2671 Oxamyl 1441000	
o-Anisidine 0495000 2431 0xane 0199006 1040 7	75-21-8
o-Anisidine hydrochloride 0496000 Oxetanone 0149005 2521 6	374-82-8
o-Chloronitrobenzene 0097003 1578 Oxide of nitrogen 0305003 1067 1	10102-44-0
o-Chloronitrobenzene 0097006 1578 Oxidoethane 0199007 1040 7	75-21-8
	75-21-8
Octachloronaphthalene 1427000 Oxyacyclopropane 0199009 1040 7	75-21-8
	108-95-2
Octane 0312000 1262 111-65-9 Oxydisulfoton 1397000	
	7783-41-7
Octanol 1430000 Oxygen (compressed gas) 0315000 1072 7	7782-44-7
Octene 0313000 111-66-0 Oxygen (refrigerated liquid) 0315001 1073 7	7782-44-7
Octyl epoxy tallate 1431000 o-Xylene 0412007 1307	
	50-00-0
o-Dinitrobenzene 0166005 1597 Ozone 1442000	
0il of bitter almonds 1842006 1662 98-95-3	
Oil of turpentine 0400001 1299 8006-64-2 Paint thinner 1445000 1263	

	Chemical	UN	CAS		Chemical	UN	CAS
Chemical Name	ID No.	No.	No.	Chemical Name	ID No.	No.	No.
Paint, latex	1443000			Pentyltrichlorosilane	0033001	1728	107-72-2
Paint, oil base	1444000	1263		Peracetic acid	1463000	2131	
p-Aminopyridine	0023006	2671		PERC	0375003	1897	127-18-4
p-Aminopyridine	0023008	2671		Percarbamide	0401003	1511	124-43-6
Panfuran S	1446000			Perchlor	0375004	1897	127-18-4
p-Anisidine	0497000	2431		Perchloric acid	0322000	1873	7601-90-3
Paraformaldehyde	1447000	2213		Perchloroethylene	0375005	1897	127-18-4
Paraldehyde	1448000	1264		Perchloromethyl mercaptan	1464000	1670	
Paramoth	0128003	1592	106-46-7	Perchloryl fluoride	1465000	3083	
Paraquat	1449000	2781		Perclene	0375006	1897	127-18-4
Paraquat methosulfate	1450000			Perfluoroethylene	0378001	1081	116-14-3
Parathion	1451000	2783		Petrol	0217004	1203	8006-61-9
para-Xylene	0412008	1307		Petrolatum	1466000		
Parazene	0128004	1592	106-46-7	Petroleum	0299003		8030-30-6
Paris green	1452000	1585		Petroleum distillate	0299004		8030-30-6
p-Benzoquinone	0041002	2587	106-51-4	Petroleum ether	0299005		8030-30-6
PCE	0375002	1897	127-18-4	Petroleum gas, liquified	0252003	1075	68476-85-7
p-Chloro -m-cresol	0727000			Petroleum naphtha	1467000	1255	
p-Chloroaniline	0691000	2018		Petroleum solvent	0299006		8030-30-6
p-Chloro-m-cresol	0694000			Phenanthrene	1468000		
p-Chloronitrobenzene	0097004	1578		Phenic acid	0323007		108-95-2
p-Chloronitrobenzene	0097007	1578		Phenol trinitrate	0336003		88-89-1
p-Chloro-o-toluidine	0717000			Phenol (molten)	0323000	2312	108-95-2
p-Chlorotoluene	0104004	2238	106-43-4	Phenol (solid)	0323001	1671	108-95-2
PCP	0318002	3155	87-86-5	Phenol (solution)	0323002	2821	108-95-2
p-Cresidine	0785000			Phenyl alcohol	0323008		108-95-2
p-Cymene	0808000	2046		Phenyl bromide	0055001	2514	108-86-1
PDB	0128005	1592	106-46-7	Phenyl chloride	0093004	1134	108-90-7
p-Dichlorobenzene	0128000	1592	106-46-7	Phenyl ethylene	0362003	2055	100-42-5
Penta-2,4-dione	0320000	2310	123-54-6	Phenyl fluoride	0209004	2387	462-06-6
Pentaborane	0317000	1380	19642-22-7	Phenyl isocyanate	1474000	2487	
Pentaborane monohydride	0317001	1380	19642-22-7	Phenyl mercaptan	0326000	2337	108-98-5
Pentacarbonyliron	0237002	1994	13463-40-6	Phenyl phosphorous dichloride	0327000	2798	644-97-3
Pentachlorodibenzo-p-dioxins	1454000			Phenyl phosphorous thiodichloride	1478000	2799	
Pentachloroethane	1455000	1669		Phenyl silatrane	1479000		
Pentachlorophenate, sodium	1456000	2567		Phenyl trichloromethane	0042004	2226	98-07-7
Pentachlorophenol	0318000	3155	87-86-5	Phenylacetonitrile	0324000	2470	140-29-4
Pentadecanol	1457000			Phenylamine	0035006	1547	62-53-3
Pentadecylamine	1458000			Phenylarsinedichloride	0325002	1556	696-28-6
Pentadione	0320004	2310	123-54-6	Phenylcarboxyamide	0038003		
Pentaerythritol	1459000	4	440.00.5	Phenylcarbylamine chloride	1469000	1672	
Pentamethylene	0119001	1146	142-29-0	Phenylcyanide	0040003	2224	100-47-0
Pentane	0321000	1265	109-66-0	Phenyldichloroarsine	0325000	1556	696-28-6
Pentanoic acid	1460000	1760		Phenylenediamine	1472000	1673	

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Phenylethane	0179002	1175	100-41-4	Picfume	0099003	1580	76-06-2
Phenylhydrazine hydrochloride	1473000			Picoline	1493000	2313	
Phenylic acid	0323009		108-95-2	Picral	0336004		88-89-1
Phenylmercuric acetate	1475000	1674		Picric acid (>10% water)	0336000	1344	88-89-1
Phenylmethane	0384003	1294	108-88-3	Picric acid (dry or <30% water)	0336001	0154	88-89-1
Phenylphosphine dichloride	0327003	2798	644-97-3	Picride	0099004	1580	76-06-2
Phenylthiocarbamide	0328002	2767	103-85-5	Picrotoxin	1494000	1584	
Phenylthiourea	0328000	2767	103-85-5	Pimelic ketone	0116005	1915	108-94-1
Phorate	1480000	3018		Pine oil	1495000		
Phosacetim	1481000			Pinene	0337001	2368	80-56-8
Phosfolan	1482000	2783		Piperazine	1496000	2579	
Phosgen	0329006	1076	75-44-5	Piperidine	0338000	2401	110-89-4
Phosgene	0329000	1076	75-44-5	Piperylene	0319002		504-60-9
Phosmet	1483000			Piprotal	1497000		
Phosphamidon	1484000			Platinum tetrachloride	1498000		
Phosphine	0330000	2199	7803-51-2	p-Nitrobenzene	0166006	1597	
Phosphoric acid	1485000	1805		p-Nitrobenzene	1842003	1662	98-95-3
Phosphoric sulfide	0333002	1340	1314-80-3	p-Nitrophenol	1396000	1663	
Phosphorochloridothioic acid,				p-Nitrotoluene	0310006	1664	
0,0-dimethyl ester	0161003	2267	2524-03-0	Polybrominated biphenyls	1499000	3152	
Phosphorus (black)	1487000			Polybutene	1500000		
Phosphorus bromide	0334001	1808	7789-60-8	Polychlorinated biphenyls	1501000	2315	
Phosphorus chloride	0335002	1809	7719-12-2	Polyethylene polyamines	1502000		
Phosphorus chloride oxide	0332001	1810	10025-87-3	Polyphosphoric acid	1503000		
Phosphorus hydride	0330002	2199	7803-51-2	Polypropylene	1504000		
Phosphorus oxide trichloride	0332002	1810	10025-87-3	Polypropylene glycol	1505000		
Phosphorus oxychloride	0332000	1810	10025-87-3	Polypropylene glycol methyl ether	1506000		
Phosphorus oxytrichloride	0332003	1810	10025-87-3	Ponceau 3R	1507000		
Phosphorus pentachloride	1488000	1806		Potassium	0339000	2257	7440-09-7
Phosphorus pentafluoride	1489000	2198		Potassium arsenite	1508000	1678	
Phosphorus pentasulfide	0333000	1340	1314-80-3	Potassium binoxalate	1510000		
Phosphorus pentoxide	1490000	1807		Potassium bromate	1511000	1484	
Phosphorus persulfide	0333003	1340	1314-80-3	Potassium chlorate	1512000	1485	
Phosphorus tribromide	0334000	1808	7789-60-8	Potassium chromate	1513000		
Phosphorus trichloride	0335000	1809	7719-12-2	Potassium cyanide	1514000	1680	
Phosphorus trihydride	0330003	2199	7803-51-2	Potassium dichloro-s-triazinetrione	1515000	2465	
Phosphorus trioxide	1491000	2578		Potassium dichromate	1516000	1479	
Phosphorus (amorphous, red)	1486000	1338		Potassium hydroxide	1517000	1813	
Phosphorus (dry or under water)	0331000	1381	7723-14-0	Potassium hydroxide solution	1518000	1814	
Phosphorus (white molten)	0331001	2447	7723-14-0	Potassium iodide	1519000		
Phosphoryl chloride	0332004	1810	10025-87-3	Potassium oxalate	1520000		
Phosvin	0413002	1714		Potassium permanganate	1521000	1490	
Phthalic anhydride	1492000	2214		Potassium peroxide	1522000	1491	
Pic-chlor	0099002	1580	76-06-2	Potassium peroxysulfate	0340003	1492	7727-21-1

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Potassium persulfate	0340000	1492	7727-21-1	Propylene glycol	1538000		-
Potassium silver cyanide	1523000	1.02		Propylene glycol ethyl ether	1539000		
Progesterone	1524000			Propylene glycol methyl ether	1540000		
Promecarb	1525000			Propylene glycol monometha	1040000		
Prometryne	1526000			crylate	0236002		27813-02-1
Propadiene	1527000	2200		Propylene oxide	0353000	1280	75-56-9
Propane	0341000	1978	74-98-6	Propylene tetramer	1541000	2850	
Propane sultone	1528000			Propylene trimer	1542000	2057	
Propanethiol	0342000	2402	107-03-9	Propyleneimine	0352000	1921	75-55-8
Propanoic acid	0345004	1848	79-09-4	Propylnitrile	0346004	2404	107-12-0
Propargite	1530000			Propynyl alcohol	0343004	1986	107-19-7
Propargyl alcohol	0343000	1986	107-19-7	Prothoate	1544000	2783	
Propargyl bromide	0058002	2345	106-96-7	Prozoin	0345005	1848	79-09-4
Propellant 12	1531000	1028		Prussic acid	0230004	1051	74-90-8
Propenamide	0011002	2074	79-06-1	Prussite	0109007	1026	460-19-5
Propene	0350003	1077	115-07-1	p-tert-Butyl phenol	0628000	2229	
Propene acid	0012005	2218	79-10-7	p-Toluene sulfonic acid	1689000	2585	
Propene oxide	0353004	1280	75-56-9	p-Toluidine	0387004	1708	
Propene-3-yl trichlorosilane	0022002	1724	107-37-9	p-Tolyl chloride	0104005	2238	106-43-4
Propenenitrile	0013003	1093	107-13-1	p-Tricresyl phosphate	1717000		
Propenoic acid	0012006	2218	79-10-7	PTU	0328004	2767	103-85-5
Propenoic acid, ethyl ester	0176004	1917	140-88-5	p-Xylene	0412010	1307	
Propenoic acid, methyl ester	0263004	1919	96-33-3	Pyrene	1545000		
Propenol	0017005	1098	107-18-6	Pyrethrins	1546000	9184	
Propenoyl chloride	0014003	9188	814-68-6	Pyridine	0354000	1282	110-86-1
Propenyl alcohol	0017007	1098	107-18-6	Pyriminil	1547000		
Propenyl chloride	0020005	1100	107-05-1	Pyrogallic acid	1548000		
Propiolactone	0344000	1993	57-57-8	Pyrophosphoric acid, tetraethyl			
Propionaldehyde	1532000	1275		ester	0377004		107-49-3
Propionic acid	0345000	1848	79-09-4	Pyrosulfuryl chloride	1549000	1817	
Propionic anhydride	1533000	2496		Pyrrolidone	1550000		
Propionic nitrile	0346003	2404	107-12-0				
Propionitrile	0346000	2404	107-12-0	Quinoline	1552000	2656	
Propoxur	1534000			Quinone	0041004	2587	106-51-4
Propyl bromide	0057002	2344	75-26-3				
Propyl chlorocarbonate	0349001	2740	109-61-5	R12	1555001	1028	
Propyl chloroformate	0349002	2740	109-61-5	R20	0096004	1888	67-66-3
Propyl cyanide	0074003	2411	109-74-0	R22	1556001	1018	
Propyl mercaptan	0342002	2402	107-03-9	R40	0273005	1063	74-87-3
Propylacetone	0271004	1224	591-78-6	R50	0257006		74-82-8
Propylamine	1535000	1277		Range oil	0249004	1223	8008-20-6
Propylene	0350000	1077	115-07-1	Ratal	0413003	1714	
Propylene butylene polymer	1536000	40-0	70.07.	Refrigerant 12	1555000	1028	
Propylene dichloride	0351000	1279	78-87-5	Refrigerant 22	1556000	1018	

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	0024005	1005	7664-41-7	Silvex	1583000	2765	1101
Refrigerant R717 Resorcinol	1557000	2876	1004-41-1	Simazine	1584000	2700	
Rodeo	0218003	2010	1071-83-6	Sinox	0167006	1598	534-52-1
Ro-Dex	0361005	1692	57-24-9	Skellysolve A	0321002	1265	109-66-0
Roundup	0218004	1032	1071-83-6	Soda lye	0359005	1205	1310-73-2
·	0218004	1219	67-63-0	Sodium	0356001	1428	7440-23-5
Rubbing alcohol Rubidium	1558000	1423	01-03-0	Sodium 2-mercaptobenzothiazol	0330001	1420	1440-23-3
Kubiululii	1336000	1423		solution	1607000		
Saccharin	1559000			Sodium alkyl sulfates	1586000		
Safrole	1560000			Sodium alkylbenzene sulfonates	1585000		
	1561000			Sodium amide	1587000		
Salicylaldehyde				Sodium arride Sodium arsenate		1685	
Salicylic acid	1562000 1563000	1942		Sodium arsenite	1588000 1589000	2027	
Saltpeter Sand acid	0210005	1778	16961-83-4	Sodium azide		1687	26620 22 0
		1//8	10901-83-4		0357000		26628-22-8
Sarin	1564000	1100		Sodium bifluoride	1590000 1591000	2439	
sec-Butanol	0604000	1120		Sodium bisulfite		2693	
sec-Butyl alcohol	0610000	1120		Sodium borate	1592000	1400	
sec-Butylamine	0611000	1010	67.60.0	Sodium borohydride	1593000	1426	
sec-Propyl alcohol	0242006	1219	67-63-0	Sodium borohydride (15% or less)	1594000	4000	
Selenic acid	1565000	1905		Sodium cacodylate	1595000	1688	
Selenium (powder)	1566000	2658	7700 07 5	Sodium chlorate	1596000	1495	
Selenium dihydride	0233002	2202	7783-07-5	Sodium chlorate solution	1597000	2428	
Selenium dioxide	1567000	2811		Sodium chromate	1598000	4000	440.00.0
Selenium hexafluoride	1568000	2194		Sodium cyanide	0358000	1689	143-33-9
Selenium oxychloride	1569000	2879		Sodium dichloro-s-triazinetrione	1599000	2465	
Selenium trioxide	1570000			Sodium dichromate	1600000	1479	
Semicarbazide hydrochloride	1571000			Sodium ferrocyanide	1601000		
Sewer gas	0234002	1053	7783-06-4	Sodium fluoride	1602000	1690	
Sextone			108-94-1	Sodium fluoroacetate	1603000		
Silane	1572000	2203		Sodium fluorosilicate	1604000	2674	
Silica gel	1574000			Sodium hydrate	0359006		1310-73-2
Silica, crystalline	1573000			Sodium hydride	1605000	1427	
Silicochloroform	0391001	1295	10025-78-2	Sodium hydrosulfide solution	1606000	2922	
Silicofluoric acid	0210006	1778	16961-83-4	Sodium hydroxide (dry)	0359000	1823	1310-73-2
Silicon chloride	0355000	1818	10026-04-7	Sodium hydroxide (solution)	0359001	1824	1310-73-2
Silicon tetrachloride	0355001	1818	10026-04-7	Sodium hypochlorite	0360000	1791	7681-52-9
Silicon (powder)	1575000	1346		Sodium hypochlorite solution	0360006	1791	7681-52-9
Silver	1576000			Sodium methylate	1608000	1431	
Silver acetate	1577000			Sodium nitrate	1609000	1498	
Silver carbonate	1578000			Sodium nitrite	1610000	1500	
Silver iodate	1579000			Sodium oxalate	1611000		
Silver nitrate	1580000	1493		Sodium perchlorate	1612000	1502	
Silver oxide	1581000			Sodium persulfate	1613000		
Silver sulfate	1582000			Sodium phosphate	1614000	9147	

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Sodium phosphate tribasic	1615000			Sulfur hydride	0234004	1053	7783-06-4
Sodium phosphide	1616000	1432		Sulfur monochloride	0369000	1828	10025-67-9
Sodium saccharin	1617000			Sulfur oxide	0367005	1079	7446-09-5
Sodium selenate	1618000	2630		Sulfur oxychloride	0372003	1834	7791-25-5
Sodium selenite	1619000	2630		Sulfur pentafluoride	1637000		
Sodium silicate	1620000			Sulfur phosphide	0333004	1340	1314-80-3
Sodium sulfate	1621000			Sulfur subchloride	0369004	1828	10025-67-9
Sodium sulfide	1622000	1385		Sulfur tetrafluoride	0370000	2418	7783-60-0
Sodium sulfite	1623000			Sulfur trioxide	0371000	1829	7446-11-9
Sodium tellurite	1624000			Sulfur (molten)	0365001	2448	7704-34-9
Sodium thiocyanate	1625000			Sulfureted hydrogen	0234003	1053	7783-06-4
Solvent 111	0389005	2831	71-55-6	Sulfuric acid	0368000	1830	7664-93-9
Sorbitol	1626000			Sulfuric acid, dimethyl ester	0162002	1595	77-78-1
Spirits of turpentine	0400002	1299	8006-64-2	Sulfuric acid, fuming	0314003	1831	8014-95-7
Stannous fluoride	1627000			Sulfuric anhydride	0371003	1829	7446-11-9
Stearic acid	1628000			Sulfuric chlorohydrin	0103002	1454	7790-94-5
Sterigmatocystin	1629000			Sulfuric oxide	0371004	1829	7446-11-9
s-Tetrachloroethane	0374004	1702	79-34-5	Sulfuric oxychloride	0372002	1834	7791-25-5
Stibine	1630000	2676		Sulfurous acid	1636000	1833	
Stoddard solvent	0299007		8030-30-6	Sulfurous acid anhydride	0367002	1079	7446-09-5
Strontium chromate	1631000			Sulfurous acid, diammonium salt	0030002	9090	10196-04-0
Strychnine	0361000	1692	57-24-9	Sulfurous anhydride	0367003	1079	7446-09-5
Strychnine sulfate	1632000	1692		Sulfurous oxide	0367004	1079	7446-09-5
Styrene	0362000	2055	100-42-5	Sulfurous oxychloride	0381003	1836	7719-09-7
Styrene monomer	0362004	2055	100-42-5	Sulfuryl chloride	0372000	1834	7791-25-5
Styrene oxide	0363000		96-09-3	Supracide	1638000		
Styrene-7,8-oxide	0363003		96-09-3	Sweet spirit of nitre	0203003	1194	109-95-5
Styrol	0362005	2055	100-42-5	sym-Allene	0451000		
Styrolene	0362006	2055	100-42-5				
Suberane	0114002	2241	291-64-5	Tabun	1639000		
Sucrose	1633000			Tannic acid	1640000		
Sulfallate	1634000			Tar	1641000	1999	
Sulfan	0371001	1829	7446-11-9	t-Butanol	0063001	1120	75-65-0
Sulfinyl chloride	0381001	1836	7719-09-7	t-Butyl alcohol	0063000	1120	75-65-0
Sulfolane	0364000		126-33-0	t-Butyl methyl ether	0270001	2398	1634-04-4
Sulfolane W	0364002		126-33-0	t-Butylamine	0065000	2734	75-64-9
Sulfonyl chloride	0372001	1834	7791-25-5	TCE	0390003	1710	79-01-6
Sulfotep	1635000	1704		тсм	0096005	1888	67-66-3
Sulfur	0365000	1350	7704-34-9	TDI	0386001	2078	584-84-9
Sulfur anhydride	0371002	1829	7446-11-9	TEA	0392003	1296	121-44-8
Sulfur chloride	0369003	1828	10025-67-9	TEL	0376001	1649	78-00-2
Sulfur chloride oxide	0381002	1836	7719-09-7	Tellurium fluoride	0373001	2195	7783-80-4
Sulfur dichloride	0366000	1828	10545-99-0	Tellurium hexafluoride	0373000	2195	7783-80-4
Sulfur dioxide	0367000	1079	7446-09-5	Tellurium (powder)	1642000		

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Telmicid	0171003		514-73-8	Tetrahydronaphthalene	1661000		
Telmid	0171004		514-73-8	Tetrahydrothiophene-1	0364003		126-33-0
Telone 2	0135006	2047	542-75-6	Tetramethyl lead	1663000		
Telone C	0135007	2047	542-75-6	Tetramethyl silane	1664000	2749	
Temik	0016003	2757	116-06-3	Tetramethylene cyanide	0015004	2205	111-69-3
TEN	0392004	1296	121-44-8	Tetramethylene oxide	0379004	2056	109-99-9
TEP	0377005		107-49-3	Tetramethylene sulfone	0364004		126-33-0
TEPP	0377006		107-49-3	Tetran	0380001	1510	509-14-8
Terbufos	1643000			Tetranitromethane	0380000	1510	509-14-8
Terephthalic acid	1644000			Tetrasol	0083006	1846	56-23-5
Terphenyl	1645000			Thallium	1665000	-0.0	00 20 0
Terpinoline	1646000	2541		Thallium acetate	1666000		
tert-Butyl ether	0620000	1149		Thallium carbonate	1667000		
tert-Butyl hydroperoxide	0068000	11-10	75-91-2	Thallium nitrate	1668000	2727	
tert-Butyl peroxybenzoate	0625000	2097	10 01 2	Thallium sulfate	1669000	1707	
tert-Butylamine	0065002	2734	75-64-9	Thallous carbonate	1670000	1101	
tert-Octyl mercaptan	1432000	3023	10 04 0	Thallous chloride	1671000		
Testosterone and its esters	1647000	3023		Thallous malonate	1672000		
TETA	0393002	2259	112-24-3	Thallous sulfate	1673000		
Tetrabutyl titanate	1648000	2233	112-24-3	THE	0379005	2056	109-99-9
Tetracarbonyl nickel	0301002	1259	13463-39-3	Thioacetamide	1675000	2030	105-55-5
Tetrachloroethane	0301002	1702	79-34-5	Thioacetainide Thioacetic acid	1676000	2436	
	0375000	1897	127-18-4	Thiobencarb	1677000	2430	
Tetrachloroethylene Tetrachloromethane	0083005	1846	56-23-5	Thiobeticals Thiobutyl alcohol	0070004	2347	109-79-5
Tetrachlorosilane	0355002	1818	10026-04-7	Thiocarbamide	0382002	2341	62-56-6
Tetrachlorotitanium	0383002	1838	7550-45-0	Thiocarbailide	1678000		02-30-0
		1030	7000-40-0				E40.00 E
Tetrachlorvinphos Tetradecanol	1651000			Thiocyanic acid, ethyl ester	0205003		542-90-5 556-64-9
_	1652000			Thiocyanomethane	0295003	0262	
Tetradecyl benzene	1654000	1704		Thioethanol	0202004	2363	75-08-1
Tetraethyl dithiopyrophosphate	1655000	1704	70.00.0	Thioethyl alcohol	0202005	2303	75-08-1
Tetraethyl lead	0376000	1649	78-00-2	Thiofanox	1680000		100 22 0
Tetraethyl pyrophosphate (liquid)	0377001	3018	107-49-3	Thiolane-1,1-dioxide	0364005	4004	126-33-0
Tetraethyl pyrophosphate (solid)	0377000	2783	107-49-3	Thiomethyl alcohol	0289004	1064	74-93-1
Tetraethyl tin	1658000			Thionazin	1681000	3018	7740.00.7
Tetraethylene glycol	1656000	0000		Thionyl chloride	0381000	1836	7719-09-7
Tetraethylene pentamine	1657000	2320	70.00.0	Thiophan sulfone	0364006	0007	126-33-0
Tetraethylplumbane	0376002	1649	78-00-2	Thiophenol	0326003	2337	108-98-5
Tetrafluoroethylene	0378000	1081	116-14-3	Thiophosgene	1682000	2474	4044.00.0
Tetrafluorohydrazine	1659000	1955		Thiophosphoric anhydride	0333005	1340	1314-80-3
Tetrafluoromethane	1660000	1982	7700 00 0	Thiosemicarbazide	1683000		00.50.5
Tetrafluorosulfurane	0370001	2419	7783-60-0	Thiourea	0382000		62-56-6
Tetrahydro-1,4-oxazine	0298004	2054	110-91-8	Thiourea (2-chlorophenyl)	0098002		5344-82-1
Tetrahydrofuran	0379000	2056	109-99-9	Thiram	1684000	2771	

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
		140.	110.				
Thorium dioxide	1685000	0070		Trichloroamylsilane	0033002	1728	107-72-2
Thorium nitrate	1686000	2976	400.00.0	Trichlorobenzene	1700000	2321	40004.04.5
TIBAL	0395002	4000	100-99-2	Trichloroborane	0049002	1741	10294-34-5
Titanium chloride	0383002	1838	7550-45-0	Trichloroboron	0049003	1741	10294-34-5
Titanium dioxide	1687000			Trichlorobutene	1702000	2322	
Titanium tetrachloride	0383000	1838	7550-45-0	Trichlorobutylsilane	0071002	1747	7521-80-4
Titanium(IV) chloride	0383003	1838	7550-45-0	Trichloroethanal	0086003	2075	75-87-6
TL 214	0186004	1892	598-14-1	Trichloroethene	0390006	1710	79-01-6
TL 69	0325003	1556	696-28-6	Trichloroethyenylsilane	0411002	1305	75-94-5
TMA	0397001	1083	75-50-3	Trichloroethyl silicon	0206002	1196	115-21-9
TNM	0380002	1510	509-14-8	Trichloroethylene	0390000	1710	79-01-6
TNT (dry or wetted with <30%				Trichloroethylsilane	0206001	1196	115-21-9
water)	1688000	0209		Trichlorofluoromethane	1704000		
Toluene	0384000	1294	108-88-3	Trichloroform	0096006	1888	67-66-3
Toluene 2,4-diisocyanate	0386003	2078	584-84-9	Trichloromethane	0096007	1888	67-66-3
Toluene diamine	0385003	1709	95-80-7	Trichloromethyl benzene	0042005	2226	98-07-7
Toluene diisocyanate	0386000	2078	584-84-9	Trichloromethylsilane	0296001	1250	75-79-6
Toluene-2,4-diamine	0385004	1709	95-80-7	Trichloromethylsilicon	0296002	1250	75-79-6
Toluidine	0387000	1708		Trichloromonosilane	0391002	1295	10025-78-2
Toluol	0384005	1294	108-88-3	Trichloronate	1705000		
Tolu-sol	0384004	1294	108-88-3	Trichloronitromethane	0099005	1580	76-06-2
Toxaphene	1690000	2761		Trichlorophenyl silane	1711000		
trans-2-Butenal	0106002	1143	4170-30-3	Trichlorophosphine	0335003	1809	7719-12-2
trans-Butene	0066004	1012	25167-67-3	Trichlorosilane	0391000	1295	10025-78-2
Tri	0389006	2831	71-55-6	Trichloro-s-triazinetrione	1713000	2468	
TRI	0390004	1710	79-01-6	Trichlorotoluene	0042006	2226	98-07-7
Triamiphos	1692000			Trichlorotrifluoroethane	1714000		
Triaziquone	1693000			Trichlorovinylsilicon	0411003	1305	75-94-5
Triazofos	1694000			Tri-clor	0099006	1580	76-06-2
Tribromoborane	0048002	2692	10294-33-4	Tridecane	1718000		
Tribromophosphine	0334002	1808	7789-60-8	Tridecanol	1719000		
Tributyl phosphate	1696000			Tridecyl benzene	1721000		
Tributylamine	1695000	2542		Trien	0393003	2259	112-24-3
Tricarbonyl methyl				Triethane	0389007		71-55-6
cyclopentadienyl manganese	1697000			Triethanol amine	1722000		
Trichlor	0390005	1710	79-01-6	Triethoxysilane	1723000		
Trichlorfon	1698000	2783		Triethyl aluminum	1724000		
Trichloro-(chloromethyl) silane	1703000	2100		Triethyl benzene	1725000		
Trichloroacetaldehyde	0086002	2075	75-87-6	Triethyl phosphate	1728000		
Trichloroacetic acid	1699000	1839	10-01-0	Triethyl phosphite	1729000	2323	
			76 02 0	,			101 // 0
Trichloroacetic acid chloride	0388001	2442	76-02-8	Triethylamine	0392000	1296	121-44-8
Trichloroacetyl chloride	0388000		76-02-8	Triethylene glycol	1726000		
Trichloroallylsilane	0022003	1724	107-37-9	Triethylene thiophosphoramide	1727000		

Trificthylenetetramine	Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Irifluoroacetic acid 1730000 269 Yes 783-10-24 Irifluenchorono 0394005 108 793-89-8 Irifluorochorono 0080003 249 7780-91-25 Irifluorochinoe 0394000 108 793-89-9 Irifluorochinoe 1756000 1755000	Triethylenetetramine	0393000	2259	112-24-3	Tris- (2-chloroethyl)amine	0399000		555-77-1
Irifluoroboron 050002 108 637-07-2 Iritlene 0394005 1082 79-38-9 Irifluorochipchen 0394004 1082 79-38-9 Trivlenyphosphate 1755000 1755000 Irifluorochipchen 0394004 1082 79-38-9 Trona 0048003 2692 1029-43-34-4 Irifluorohypic bloride 0395003 1 100-99-2 Tison bloe 040000 1299 800-64-2 Irilisobulyalaminum 0395003 1 100-99-2 Tirupentine 040000 1299 800-64-2 Irilisobulyalame 0336000 2629 2487-90-3 Tirupentine spirits 040000 1299 800-64-2 Irilisobulyalame 1734000 2325 1 Undecanol 175000 2299 800-64-2 Irilisobulyalame 1734000 2325 1 Undecanol 175000 230 800-64-2 Irilimethyl bearnethylene diamine 174000 2328 1 Undecanol 175000 1 1550-4 Irilimeth	•						2501	
Tiffuorochloroethylene 0394004 1082 79-38-9 Trixylenyl phosphate 1755000 2092 10294-33-4 Tiffuorowinyl chloride 13732000 1 79-38-9 Trixylanlin 1755000 209-23 100-99-2 Trypen blue 1755000 255-77-1 Tifisobulylalane 0395003 1 109-99-2 Turpentine oll 040000 1299 8006-64-2 Tifisobulylalane 1733000 2325 Turpentine oll 040000 1299 8006-64-2 Tifisobulylalane 1733000 2325 Turpentine oll 040000 1299 8006-64-2 Tifisobulylalane 1733000 2325 Turpentine oll 040000 1299 8006-64-2 Timethyl berzene 1733000 2325 Turpentine spirits 040000 1299 8006-64-2 Timethyl hexamethylene 1739000 2325 Turpentine spirits 040000 15903 75-14-7 Timethyl hosphite 174000 2328 Turpentine spirits 040000 1605 75-14-7	Trifluoroboron	0050002	1008	7637-07-2	. , , , , ,		1082	79-38-9
Tinfluoroviny chloride 0394004 0.082 79.88-9 Morphila Trona 048003 2692 10294.33-4 Tiffludarial 173200 10-99-22 TS160 1756000 555.77-1 Tifisobutylalaminum 0395003 2 109-92 Tirpentine 040000 1299 8006-64-2 Tifisopropanal amine 173300 228 2 Turpentine oil 040000 1299 8006-64-2 Tifimethyopanal amine 173800 2325 4 Undecane 1758000 2090 286-2 Timethy hexamethylene 1738000 2325 4 Undecane 1758000 250-1 Timethy hexamethylene diamine 174000 2328 4 Undecane 1758000 250-1 Timethyl hexamethylene 174000 2329 4 Undecane 1758000 250-2 Timethyl hexamethylene diamine 174000 2329 4 Unifume 0192006 160-9 16-9-3 Timethyl hexamethylene 174000 2329 4 Unifum	Trifluorochlorine	0089003	1749	7790-91-2	Trithion	1754000		
Tinfluoroviny chloride 0394004 0.082 79.88-9 Morphila Trona 048003 2692 10294.33-4 Tiffludarial 173200 10-99-22 TS160 1756000 555.77-1 Tifisobutylalaminum 0395003 2 109-92 Tirpentine 040000 1299 8006-64-2 Tifisopropanal amine 173300 228 2 Turpentine oil 040000 1299 8006-64-2 Tifimethyopanal amine 173800 2325 4 Undecane 1758000 2090 286-2 Timethy hexamethylene 1738000 2325 4 Undecane 1758000 250-1 Timethy hexamethylene diamine 174000 2328 4 Undecane 1758000 250-1 Timethyl hexamethylene 174000 2329 4 Undecane 1758000 250-2 Timethyl hexamethylene diamine 174000 2329 4 Unifume 0192006 160-9 16-9-3 Timethyl hexamethylene 174000 2329 4 Unifum	Trifluorochloroethylene	0394000	1082	79-38-9	Trixylenyl phosphate	1755000		
Trilisobutyl aluminum 0395001 I 00-99-24 TiS160 0399002 555-77-1 Trilisobutyl aluminum 0395003 1 00-99-24 Turpentine 040000 1299 8006-64-2 Trilisobutylalene 1733000 2324 Turpentine oil 040000 1299 8006-64-2 Triinethoxysilane 039600 9269 2487-90-3 Turpentine spirits 040000 129 8006-64-2 Trimethyl benzene 1738000 2325 Turbentyl benzene 1738000 237 Turbentyl benzene 1738000 237 Turbentyl benzene 1758000 236 Turbentyl benzene 1758000 176000	Trifluorovinyl chloride	0394004	1082	79-38-9	Trona	0048003	2692	10294-33-4
Triisobulylalane 039503 Unopentine Unupentine 040000 1298 8006-64-2 Triisobulylene 1733000 2324 Turpentine oil 0400003 1298 8006-64-2 Triisopropanol amine 1734000 928 2487-90-3 Turpentine spirits 040000 129 8006-64-2 Trimethyl benzene 1738000 2325 Londecane 1758000 230 1759000 230 1759000 230 1759000 1759000 230 1759000 176900	Trifluralin	1732000			Trypan blue	1756000		
Triisobutylene 1733000 2324 Turpentine oil Turpentine oil Turpentine spirits 0400003 1299 8006-64-2 Triisobutylene 1734000 2292 2487-90-3 Turpentine spirits 0400000 1299 8006-64-2 Trimethyl hexamethylene diamine 1739000 2325 Undecane 1758000 2301 174-70 Trimethyl hexamethylene 174000 2328 Undecane 1758000 2301 176-70 Trimethyl hosphite 174000 2328 Undecane 1759000 1605 166-3-4 Trimethyl hosphite 1741000 2328 Undecane 1759000 1605 166-3-4 Trimethyl hosphite 1742000 2228 Undecane 1759000 1605 166-3-4 Trimethyl hosphite 174200 2248 Uracli mustard 1763000 278 171-14-7 Trimethylacetic acid 1735000 1838 75-74 Uranjum hexafluorde 1764000 297 171-14-7 Trimethylacetic acid 174000 1238 75-77-4	Triisobutyl aluminum	0395000		100-99-2	TS160	0399002		555-77-1
Trinethy berzene 039600 268 2487-90-3 100	Triisobutylalane	0395003		100-99-2	Turpentine	0400000	1299	8006-64-2
Trimethoxysilane 0.396000 2.69 2487-90.3	Triisobutylene	1733000	2324		Turpentine oil	0400003	1299	8006-64-2
Trimethyl hexamethylene diamine	Triisopropanol amine	1734000			Turpentine spirits	0400004	1299	8006-64-2
Trimethyl hexamethylene diamine 1739000 2327 Undecane 1758000 230 Intermethyl hexamethylene 1759000 2978 175914 1759000 1759000 2978 175914 1759000 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 2978 175914 1759000 </td <td>Trimethoxysilane</td> <td>0396000</td> <td>9269</td> <td>2487-90-3</td> <td></td> <td></td> <td></td> <td></td>	Trimethoxysilane	0396000	9269	2487-90-3				
Trimethyl hexamethylene 1740000 232 s Undecanol acid 1759000 1769000 Trimethyl phosphite 1741000 232 s Undecanol 1760000 1605 s 160-93-4 Trimethyl phosphite 1742000 232 s Unifume 0192006 1605 s 160-93-4 Trimethylacetic acid 1735000 1735000 243 s Uracil mustard 1763000 297 s 1763000 277 s 1763000 278 s 1763000 278 s 1763000 278 s 1763000 278 s 1763000 278 s 1763000 278 s 1764000 297 s 1764000 297 s 1764000 297 s 1764000 297 s 1764000 297 s 1764000 297 s 1764000 297 s 1764000 297 s 1764000 297 s 1767000 298 s 1767000 298 s 1767000 298 s 1767000 298 s 1767000 298 s 1767000 298 s 1767000 298 s 1767000 298 s 1767000 1767000 176700 17670	Trimethyl benzene	1738000	2325		UDMH	0159003	1163	57-14-7
diisocyanate 1740000 2328 Undecanol 1760000 1605 160-93-48 Trimethyl phosphite 1741000 2329 Unifume 0192006 1605 160-93-48 Trimethyl tin chloride 1742000 Trimethylacetic cald 1735000 Uracil mustard 1765000 Trimethylacetic cald 1776000 278 Trimethylacetyl chloride 1736000 2438 Uracil mustard 1765000 278 1764000 278 Trimethylacetyl chloride 1736000 1803 75-50-3 Uranium hexaffuoride 1764000 279 Trimethylacetyl chloride 0398000 1803 75-50-3 Uranium metal (pyrophoric) 1764000 279 Trimethylene 0398000 1805 75-77-4 Uranium peroxide 1766000 2981 1766000 Trimithylene 0121001 174500 275-77-4 Uranyl sulfate 1769000 2981 1766000 Trimithylene 1743000 174500 174	Trimethyl hexamethylene diamine	1739000	2327		Undecane	1758000	2330	
Trimethyl phosphite 1741000 2329 Unifume 0192006 1605 160-93-4 Trimethyl tin chloride 1742000 Unifume 0159004 1163 57-14-7 Trimethylacetlc acid 1735000 243 Uracil mustard 1763000 2978 Trimethylacetly chloride 1736000 2978 Uranium hexafluoride 1766000 2978 Trimethylamine(anhydrous) 0397000 1803 75-50-3 Uranium metal (pyrophoric) 1766000 2978 Trimethylene 0121001 1927 95-75-7 Uranium metal (pyrophoric) 1766000 9180 Trimitrobenzene (dry or wetted 0238003 1969 75-28-5 Uranyl acetate 1766000 9180 1768000 9281 Trimitrobenzene (dry or wetted 0238003 1969 75-28-5 Uranyl suifate 1768000 911 124-43-6 Trimitrobenzeic (wetted with 1744000 1354 Uranyl suifate 0401000 1511 124-43-6 Trimitrobenzoic acid (dry or wetted 1746000 1355 Uran	Trimethyl hexamethylene				Undecanoic acid	1759000		
Trimethyl tin chloride 1742000 unsym-Dimethylhydrazine 0159004 1163 57-14-7 Trimethylacetic acid 1735000 2438 Uracil mustard 1765000 2978	diisocyanate	1740000	2328		Undecanol	1760000		
Trimethylacetic acid 1735000 Uracil mustard 176000 2978 Trimethylacetyl chloride 1736000 2438 Uranium hexafluoride 1765000 2978 Trimethylamine(anhydrous) 0397000 1083 75-50-3 Uranium metal (pyrophoric) 1764000 2979 Trimethylchlorosilane 0398000 1298 75-77-4 Uranium peroxide 1766000 1766000 Trimethylmethane 0238003 1969 75-28-5 Uranyl acetate 1767000 9180 Trinitrobenzene (dry or wetted with >30% water) 1743000 2213 Urea 1770000 171 124-43-6 Trinitrobenzoic acid (dry or wetted with >30% water) 1744000 1354 Urea peroxide 0401000 151 124-43-6 Trinitrobenzoic acid (wetted with >30% water) 1745000 1355 Urea peroxide 0401000 151 124-43-6 Trinitrobenzoic acid (wetted with >30% water) 1745000 215 Urea peroxide 0401000 171 124-43-6 Trinitroplencic (cry or wetted with >30% water) 1745000 215	Trimethyl phosphite	1741000	2329		Unifume	0192006	1605	106-93-4
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Tripropylene glycol methyl ether 1751000 Vanadium trichloride oxide 0402002 2243 7727-18-6 Tris-(2,3-dibromopropyl) Vanadyl sulfate 1777000 2931	Triphenyl tin chloride	1749000			Vanadium oxytrichloride	0402000	2243	7727-18-6
Tris-(2,3-dibromopropyl) Vanadyl sulfate 1777000 2931	Tripropylene glycol	1750000			Vanadium pentoxide	1776000	2862	
	Tripropylene glycol methyl ether	1751000			Vanadium trichloride oxide	0402002	2243	7727-18-6
phosphate 1753000 Vanadyl trichloride 0402003 2243 7727-18-6	Tris-(2,3-dibromopropyl)				Vanadyl sulfate	1777000	2931	
	phosphate	1753000			Vanadyl trichloride	0402003	2243	7727-18-6

Chemical Name	Chemical ID No.	UN No.	CAS No.	Chemical Name	Chemical ID No.	UN No.	CAS No.
Vapotone	0377007		107-49-3	Zectran	1785000		
VC	0405004	1086	75-01-4	Zinc	1786000	1436	
VCM	0405005	1086	75-01-4	Zinc acetate	1787000	9153	
VDC	0408003	1303	75-35-4	Zinc ammonium chloride	1788000	9154	
Vidden D	0135008	2047	542-75-6	Zinc arsenate	1789000	1712	
Vinyl A monomer	0403006	1301	108-05-4	Zinc bichromate	1790000		
Vinyl acetate	0403000	1301	108-05-4	Zinc borate	1791000		
Vinyl acetylene	1778000			Zinc bromide	1792000	9156	
Vinyl allyl ether	1779000			Zinc carbonate	1793000	9157	
Vinyl amide	0011003	2074	79-06-1	Zinc chloride	1794000	2331	
Vinyl benzene	0362007	2055	100-42-5	Zinc chromate	1795000		
Vinyl bromide	0404000	1085	593-60-2	Zinc dialkyldithiophosphate	1797000		
Vinyl carbinol	0017008	1098	107-18-6	Zinc dithionite	1798000	1931	
Vinyl chloride	0405000	1086	75-01-4	Zinc fluoride	1799000	9158	
Vinyl chloride monomer	0405006	1086	75-01-4	Zinc fluoroborate	1800000		
Vinyl cyanide	0013005	1093	107-13-1	Zinc fluorosilicate	1801000	2855	
Vinyl ethyl ether	0406000	1302	109-92-2	Zinc formate	1802000	9159	
Vinyl fluoride	0407000	1860	75-02-5	Zinc methyl	0164002	1370	544-97-8
Vinyl formic acid	0012008	2218	79-10-7	Zinc nitrate	1803000	1514	
Vinyl isobutyl ether	1780000	1304		Zinc oxide	1804000		
Vinyl methyl ether	0409000	1087	107-25-5	Zinc phenolsulfonate	1805000	9160	
Vinyl methyl ketone	0297004	1251	78-94-4	Zinc phosphide	0413000	1714	
Vinyl neodecanoate	1781000			Zinc potassium chromate	1806000		
Vinyl toluene	0410000	2618	25013-15-4	Zinc sulfate	1807000	9161	
Vinyl trichlorosilane	0411000	1305	75-94-5	Zinccyanide	1796000	1713	
Vinylethylene	0059007	1010	106-99-0	Zineb	1808000		
Vinylidene chloride	0408000	1303	75-35-4	Ziram	1809000		
Vinylsilicon trichloride	0411004		75-94-5	Zirconium	1810000	2008	
Vorlex	0288005	2477	556-61-6	Zirconium acetate	1811000		
Vulnoc AB	0025001	9080	1863-63-4	Zirconium nitrate	1812000	2728	
				Zirconium oxychloride	1813000		
Weedone	0122003	2765	94-75-7	Zirconium potassium fluoride	1814000	9162	
White caustic	0359007		1310-73-2	Zirconium sulfate	1815000	9163	
White phosphorus	0331004		7723-14-0	Zirconium tetrachloride	1816000	2503	
Wood alcohol	0260005	1230	67-56-1	ZP	0413004	1714	
Wood ether	0157003	1033	115-10-6	Zylylene dichloride	1817000		
Woodtreat	0318003	3155	87-86-5				
Xenon	1782000	2036					
Xylene	0412000	1307					
Xylenol	1783000	2261					
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