

APPENDIX F

HAZARD RANKING

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance or legislation of the jurisdiction.

User note:

About this appendix: Appendix F is intended to be a companion to the specific requirements of Chapters 51 through 67, which regulate the storage, handling and use of all hazardous materials classified as either physical or health hazards. These materials pose diverse hazards, including instability, reactivity, flammability, oxidizing potential or toxicity; therefore, identifying them by hazard ranking is essential. This appendix lists the various hazardous material categories that are defined in this code, along with the NFPA 704 hazard ranking for each.

SECTION F101 GENERAL

F101.1 Scope. Assignment of levels of hazards to be applied to specific hazard classes as required by NFPA 704 shall be in accordance with this appendix. The appendix is based on application of the degrees of hazard as defined in NFPA 704 arranged by hazard class as for specific categories defined in Chapter 2 of the *International Fire Code* and used throughout.

F101.2 General. The hazard rankings shown in Table F101.2 have been established by using guidelines found within NFPA 704. As noted in Section 4.2 of NFPA 704, there could be specific reasons to alter the degree of hazard assigned to a specific material; for example, ignition temperature, flammable range or susceptibility of a container to rupture by an internal combustion explosion or to metal failure while under pressure or because of heat from external fire. As a result, the degree of hazard assigned for the same material can vary when assessed by different people of equal competence.

The hazard rankings assigned to each class represent reasonable minimum hazard levels for a given class based on the use of criteria established by NFPA 704. Specific cases of use or storage may dictate the use of higher degrees of hazard in certain cases.

APPENDIX F

TABLE F101.2
FIRE FIGHTER WARNING PLACARD DESIGNATIONS BASED ON HAZARD CLASSIFICATION CATEGORIES

HAZARD CATEGORY	DESIGNATION
Combustible liquid II	
Combustible liquid IIIA	
Combustible liquid IIIB	F2
Combustible dust	F2
Combustible fiber	F1
Cryogenic flammable	F3 or F2 ^a
Cryogenic oxidizing	F3
Explosive	F4, H3
Flammable solid	OX, H3
Flammable gas (gaseous)	R4
Flammable gas (liquefied)	F2
Flammable liquid IA	F4
Flammable liquid IB	F4
Flammable liquid IC	F3
Organic peroxide UD	F3
Organic peroxide I	R4
Organic peroxide II	F4, R3
Organic peroxide III	F3, R3
Organic peroxide IV	F2, R2
Organic peroxide V	F1, R1
Oxidizing gas (gaseous)	None
Oxidizing gas (liquefied)	OX
Oxidizer 4	OX4
Oxidizer 3	OX3
Oxidizer 2	OX2
Oxidizer 1	OX1
Pyrophoric gases	F4
Pyrophoric solids, liquids	F3
Unstable reactive 4D	R4
Unstable reactive 3D	R2
Unstable reactive 3N	R2
Unstable reactive 2	None
Unstable reactive 1	W3
Water reactive 3	W2
Water reactive 2	H3, COR
Corrosive	H3
Toxic	H4
Highly toxic	

a. F3 = Finely divided solids, typically less than 75 micrometers (µm) (200 mesh), that pose an elevated risk of forming an ignitable dust cloud, such as finely divided sulfur, *National Electric Code* Group E dusts (for example, aluminum, zirconium and titanium) and bisphenol A. F2 = Finely divided solids less than 420 µm (40 mesh) that pose an ordinary risk of forming an ignitable dust cloud.

F—Flammable category.
R—Reactive category.
H—Health category.
W—Special hazard: water reactive.
OX—Special hazard: oxidizing properties.

COR—Corrosive.
UD—Unclassified detonable material.
4D—Class 4 detonable material.
3D—Class 3 detonable material.
3N—Class 3 nondetonable material.

SECTION F102
REFERENCED STANDARD

NFPA 704—17 Identification of the Hazards of Materials for Emergency Response

F101.1, F101.2