Fire Department
401 Oak Street, #402
Roseville, California 95678-2649

Hazard Warning Signage Guidelines

Where hazardous materials are stored in quantities that require a permit pursuant to CFC Table 105.6.20, hazard warning (NFPA) signage shall be posted in accordance with CFC Section 2703.5 and 2703.6.

Number Selection for Each Hazard Category

The placard warning system numbers for each hazard category will selected according to the following criteria:

Health

4 Materials that have an inhalation Threshold Limit Value (TLV) or Permissible Exposure Limit (PEL) of less than 100 parts per million (ppm) and on skin contact can be absorbed through the skin to create a poisonous effect on the body.

3 All other materials that have an inhalation TLV or PEL of less than 100 ppm and may on skin contact create an irritating or burning effect on the exposed skin.

2 Materials that have an inhalation TLV or PEL from 100 to 1000 ppm and may on skin contact create an irritating effect on the exposed skin.

1 Materials that have an inhalation TLV or PEL over 1000 but under 5000 ppm.

Note: If the TLV or PEL is given in mg/m^3, this can be converted to ppm by:

$$\frac{Mg/m^3 \times 24.45}{\text{Molecular weight of the material}}$$

(The chemical formula for the material and a periodic chart will be needed.)

If no TLV or PEL is available for the material, it will be given a “3” rating until a TLV or PEL is established that will give it another rating.

Flammability

4 All flammable gases and flammable liquids with a flash point below -45°F., and dusts or mists which can form explosive mixtures with air.

3 All flammable liquids with flash points from -45°F. to 100°F., and solid materials in the form of coarse dusts, fibers or shreds which may burn rapidly.

2 All combustible liquids or solids with flash points from 101°F to 140°F.

1 All combustible liquids with flash points from 141°F. to 300°F.

Reactivity

4 Materials readily capable of detonation or explosive reaction at normal temperatures and pressures. Includes materials that are very sensitive to heat, shock or light. Examples would include: explosives A and B and organic peroxides.

3 Materials which when heated and under confinement are capable of detonation and which may react violently with water. A ~~**W**~~ should appear if an explosive reaction with water can be expected. Examples would include: blasting agents, fireworks, and ammonium nitrate fertilizer.

2 Materials which will undergo a violent chemical change at elevated temperatures and pressures but do not detonate. A ~~**W**~~ should appear if a violent reaction with water may occur or potentially explosive mixtures with water may be formed. Examples would include: combustible metals and water reactive corrosive materials.

1 Materials which are normally stable, but may become unstable in combination with other materials or at elevated temperatures and pressures. A ~~**W**~~ should appear if a vigorous but not violent reaction with water may take place. Examples would include: most common corrosive or oxidizing materials.

Special Hazards

Special hazard symbols such as ~~**W**~~ (water reactive) **OXY** (oxidizing material), **CRY** (cryogenic liquid), **COR** (corrosive materials) or the radiation warning will be added to the bottom white section of placards when available information indicates that these special hazards exist. When multiple special hazards exist, they will be listed on additional white background signs below the placard.

Commonly Encountered Hazardous Materials

More information on other chemicals is available. Call the Fire Department if you need assistance.

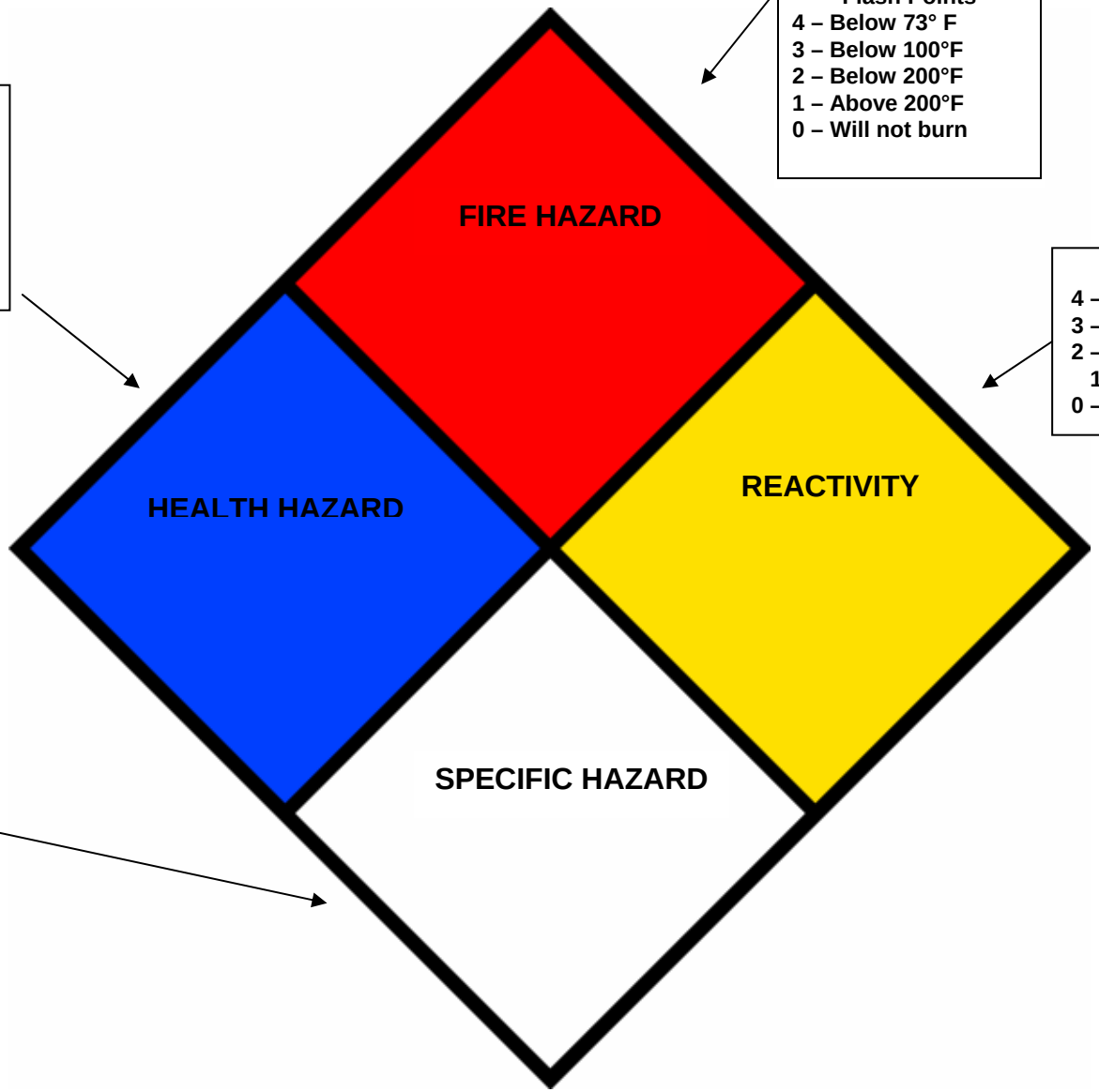
Acetic Acid	H-3, F-2, R-1, COR
Acetone	H-2, F-3
Aluminum Acetate	H-2
Ammonia	H-3
Ammonium Hydroxide	H-3
Ammonium Fluoride	H-3
Ammonium Persulfate	H-3, R-1, OXY
Ammonium Phosphate	H-3, COR
Amyl Acetate	H2, F-3
Argon	H-1, Possible CRY
Aromatic Hydrocarbon Solvent	H-2, F-3
Arsenic	H-4
Arsine	H-4, F-4
Benzene	H-3, F-3
Benzyl Peroxide	H-3, F-4, R-4, OXY
Boron Trichloride	H-3, COR, ~~W~~
Boron Trifluoride	H-4, COR, ~~W~~
Bromotrifluoromethane	H-1
Butoxyethanol	H-3, F-2
Butyl Alcohol	H-2, F-3
Carbon Dioxide	H-1
Carbon Tetrachloride	H-4
Carbon Tetrafluoride (Freon 14)	H-2
Cellosolve Acetate	H-2, F-2
Chlorine	H-3, COR
Chlorodifluordethane (Freon 142)	H-2, F-3
Chlorodifluoromethane (Freon 22)	H-2
Chloroform	H-3
Chloropentafluodethane (Freon 115)	H-2
Chlorotrifluromethane (Freon 13)	H-2
Chromic Acid	H-3, R-1, OXY
Diborane	H-4, F-4, R-3, ~~W~~
Dibromodifluoromethane (Freon 12.B2)	H-2
Dichloro-1,1,2,2-Tetrafluorethane	H-2
Dichlorodifluoromethane (Freon 12)	H-2
Dichloroethane	H-2
Dichlorofluoromethane (Freon 21)	H-2
Dichlorosilane	H-3, F-4, R-3
Dichlorotetrafludroethane (Freon 114)	H-2
Diesel	H-2, F-2
Diethylether	H-2, F-4, R-1
Dioxane	H-2, F-3, R-1
Ethanol	H-1, F-3
Ethanolamine	H-3, F-1
Ethyl Acetate	H-2, F-3
Ethylene	H-1, F-4, R-2
Ethylene Glycol	H-3
Fluoroform	H-3
Gasoline	H-2, F-3
Helium	H-1
Hexafluoroethane	H-2

Hexamethyldisilazane	H-2, F-3, R-1
Hydrazine	H-3, F-3, R-2
Hydrochloric Acid	H-3, COR
Hydrofluoric Acid	H-4, COR
Hydrogen Cyanide	H-4, F-3, R-2
Hydrogen Peroxide - 35%,	H-2, R-1, OXY
Hydrogen Perioxide – 53%	H2, R-3, OXY
Hydrogen	F-4, Possible CRY
Isopropyl Acetate	H-2, F-3
Isopropyl Alcohol	H-2, F-3
Methane	H-1, F-4
Methanol	H-2, F-3
Methyl Ethyl Ketone	H-2, F-3
Methylene Chloride	H-2, F-1
N-Butyl Acetate	H-2, F-3
Nitric Acid	H-3, R-1, OXY
Nitrogen	H-1, Possible CRY
Nitrous Oxide	H-1, R-1, OXY
Oxalic Acid	H-3, F-1
Oxygen	R-1, OXY, Possible CRY
Pentachlorophenol	H-3, F-2
Pentanone	H-2, F-3
Perchlorethylene	H-3
Phenol	H-4, F-2
Phosphorous Pentachloride	H-3, R-2, COR, ~~W~~
Phosphine	H-4, F-4
Phosphoric Acid	H-3, F-1, COR
Phosphoric Oxychloride	H-3, R-2, COR, ~~W~~
Phosphorous Trichloride	H-3, R-2, COR, ~~W~~
Potassium Cyanide	H-3
Potassium Hydroxide	H-3, R-1, COR
Potassium Permanganate	H-1, R-1, OXY
Propane	H-2, F-4
Silane	H-4, F-4, R-2, ~~W~~
Silicon Tetrachloride	H-3, R-2, COR, ~~W~~
Sodium Cyanide	H-3
Sodium Chlorate	H-1, R-2, OXY
Sodium Hydroxide	H-3, R-1, COR
Sodium Hypochlorite	H-3, COR
Sodium Nitrate	H-1, R-1, OXY
Sodium Persulfate	H-3, R-2, OXY
Stoddard Solvent	H-2, F-2
Sulfonic Acid	H-3, COR
Sulfur Hexafluoride	H-2
Sulfuric Acid	H-3, R-2, COR, ~~W~~
Tetrachlorodifluoroethane (Freon 112)	H-2
Toluene	H-2, F-3
Trichloroethane	H-3, COR
Trichloroethylene	H-4
Trichlorofluoromethane (Freon 11)	H-2
Trichlorofluoromethane (0.3% Nitromethane) (Freon 11.5)	H-2
Trichlorotrifluoroethane (Freon 113)	H-2
Xylene	H-2, F-3

HAZARD INFORMATION SIGN

Fire Hazard (Red)
Flash Points
4 – Below 73° F
3 – Below 100°F
2 – Below 200°F
1 – Above 200°F
0 – Will not burn

Health Hazard (Blue)
4 – Deadly
3 – Extreme Danger
2 – Hazardous
1 – Slightly Hazardous
0 – Normal Material



Reactivity (Yellow)
4 – May detonate
3 – Shock & Heat may detonate
2 – Violent chemical change
1 – Unstable if heated
0 – Stable

Specific Hazard (White)

OXY – Oxidizer

ACID – Acid

ALK – Alkali

COR – Corrosive

~~W~~ - Use NO WATER

- Radiation Hazard