# **CHEMICALS**

## ChemAlert\* Storage Codes

Indicate the recommended method of chemical storage.

Every Fisher Science Education\* label features one of the five following color codes to indicate storage needs.

### Red — Flammable

Store in area segregated for flammable reagents.

#### Blue — Health Hazard

Toxic if inhaled, ingested or absorbed through skin; store in secure area.

#### Yellow — Reactive and Oxidizing

May react violently with air, water or other substances; store away from flammable and combustible materials.

# White — Corrosive

May harm skin, eyes and mucous membranes; store away from red-, yellow- and blue-coded reagents. Store acids and bases separately.

#### Gray — Moderate Hazard

Presents no more than moderate hazard in any of the hazards previously listed.

#### **Dot Classifications**

The U.S. Department of Transportation (DOT) publishes transportation regulations covering shipments of materials classified as hazardous within the continental United States and its territories. These regulations, covering packaging, marking, labeling and shipping paper descriptions, are published in 49 CFR Parts 100-185. Materials are classified according to the system listed below.

#### DOT Hazard Class /Division **DOT Hazard Description** 1 Explosives Flammable Gas 2.1 Non-Flammable Gas 2.2 2.3 Poison Gas 3 Flammable Liquid 4.1 Flammable Solid Spontaneously Combustible 4.2 Dangerous When Wet 4.3 Oxidizer 5.1 5.2 Organic Peroxide 6.1 Poison 6.2 Infectious Substance 7 Radioactive 8 Corrosive 9 Miscellaneous

# **NFPA Hazard Code Ratings**

The National Fire Protection Association has developed a numerical rating system that reflects the health, flammability, self-reactivity and other hazards of materials, including reactivity with water, as specified in NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response. Potential hazards are evaluated based on the degree of hazard, and the numerical rating is placed inside the universal NFPA symbol. (Included on all Fisher Science Education\* chemical labels.)

NFPA Rating Explanation Guide					
RATING NUMBER	HEALTH HAZARD	FLAMMABILITY HAZARD	INSTABILITY HAZARD	RATING Symbol	SPECIAL HAZARD
4	Can be lethal	Will vaporize and readily burn at normal temperatures	May explode at normal temperatures and pressures	ALK	Alkaline
3	or permanent	Can be ignited under almost all ambient temperatures	May explode at high temperature or shock	ACID	Acidic
				COR	Corrosive
2	Can cause temporary incapacitiation or residual injury	Must be heated or high ambient temperature to burn	Violent chemical change at high temperatures or pressures	ох	Oxidizing
		Must be preheated before ignition can	Normally stable. High temperatures	<b>Å</b> ,Å	Radioactive
	irritation	occur	make unstable	₩	Reacts violently or explosively with water
0	No hazard	Will not burn	Stable	₩ох	Reacts violently or explosively with water and oxidizing

# **Restrictions on Sale of Chemicals**

Chemicals can be sold only to institutions, to full-time educators and to professionals, on purchase order or organization letterhead. We are not permitted to honor student orders.

A hazardous surcharge will be applied to chemicals that are designated hazardous by the U.S. Dept. of Transportation at the time of shipment. Certificates of analysis are NOT available for the chemicals featured in this catalog.

Fisher Science Education chemicals are intended to be used for **educational purposes** only.