THE NEW SCHOOL

Chemical Hazard Symbols

Safety Tips

As a designer, artist, or student you will see a variety of chemical hazard symbols or pictograms on container labels and/or Material Safety Data Sheets in the shops and other work areas. You should become familiar with them as they will inform you at a glance of the type and degree of the hazards and, therefore, the degree of care and necessary safety precautions you should take.

The Occupational Safety and Health Administration (OSHA) requires that chemical labels include pictograms that alert users of specific chemical hazards. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s).

Health Hazard

Carcinogen
Mutagenicity
Reproductive Toxicity
Respiratory Sensitizer
Target Organ Toxicity
Aspiration Toxicity

Flame

Flammables
Pyrophorics
Self-Heating
Emits Flammable Gas
Self-Reactives
Organic Peroxides

Exclamation Mark

Irritant (skin and eye)
Skin Sensitizer
Acute Toxicity
Narcotic Effects
Respiratory Tract Irritant
Hazardous to Ozone Layer (Non-Mandatory)

Corrosion

Skin Corrosion/Burns
Eye Damage
Corrosive to Metals

Exploding Bomb

Explosives
Self-Reactives
Organic Peroxides

Gas Cylinder

Gases Under Pressure

Flame Over Circle

Oxidizers

Environment

Aquatic Toxicity

Skull and Crossbones

Acute Toxicity
(fatal or toxic)

Please contact your shop technician or Katherine Perkins (perkinsk@newschool.edu), Environmental Health and Safety, Office of Facilities Management, if you have any questions about the information on this sheet.

For more information on any health issue, contact Wellness and Health Promotion, Student Health Services at wellness@newschool.edu or 212.229.1671, option 4.

Safety Tips were made possible by The New School Occupational Safety Work Group.

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There are two systems that can help you to quickly identify both the type and severity of hazard associated with a product.

Both systems categorize hazards with color-coding and rank their severity with a numerical rating system. However, it should be noted the systems are not interchangeable as their numerical ratings criteria differ.

National Fire Protection Association System (NFPA)

Uses a diamond format and the features described in the key.

White area in the diamond conveys a special hazard. This can be water-reactive (W) or an oxidizer (OXY). An oxidizer can initiate or promote combustion in other materials.

Hazardous Materials Identification System (HMIS)

Uses a stacked bar format and the features described in the key.

White bar represents recommended personal protective equipment (PPE) indicated by a letter. Refer to the PPE Index* below.

Key

Red indicates flammability.

Blue indicates health hazard.

Yellow indicates reactivity.

0 = no or minimal hazard
1 = slight hazard
2 = moderate hazard
3 = serious hazard
4 = extreme hazard

Symbol	Personal Protective Equipment (PPE) Required
A	Safety Glasses
B	Safety Glasses + Gloves
C	Safety Glasses + Gloves + Apron
D	Face Shield + Gloves + Apron
E	Safety Glasses + Gloves + Dust Respirator
F	Safety Glasses + Gloves + Apron + Dust Respirator

Symbol	Personal Protective Equipment (PPE) Required
G	Safety Glasses + Gloves + Vapor Respirator
H	Splash Goggles + Gloves + Apron + Vapor Respirator
I	Safety Glasses + Gloves + Dust and Vapor Respirator
J	Splash Goggles + Gloves + Apron + Dust and Vapor Respirator
K	Air Line Hood or Mask + Gloves + Full Suit + Boots
X	Ask supervisor or safety specialist for handling instructions.

*Information source: www.chemlabs.uoregon.edu/Safety/HMIG_PPE.html

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