

Hazardous Material Information System

Labeling Instructions for Unused Chemicals

Promoting Chemical Safety through Proper Labeling

To maintain a basic level of safety, the University of Missouri requires that all chemicals in hazardous material areas be clearly labeled. The labeling should include the original manufacturer's label when possible. Labels on containers of *all* chemicals must have the chemical name. Labels on containers of *hazardous* chemicals must also show the hazard warnings (flammable, corrosive, oxidizer, water reactive, etc.).

To understand and define these hazard warnings on your labels, Environmental Health and Safety (EHS) has created the [Chemical Hazard Reference Information](#) sheet. This sheet is a quick reference to understand the National Fire Protection Association (NFPA) hazard rating system used on the Hazardous Material Information System (HMIS) labels. The labels are typically seen as the color-coded diamond or bars. Each of the color-coded sections gives information on the chemical's affect to human health, flammability, reactivity, and any special hazards.

When labeling a transfer container with a HMIS label, the NFPA hazard ratings can often be found in the chemical's Material Safety Data Sheet (MSDS). MSDS come in many formats, but the more common are the American National Standards Institute (ANSI) and the Occupational Health and Safety (OSHA) formats. The NFPA hazard ratings can typically be found in *section 16, Other Information* of the MSDS (ANSI format).

If the hazard ratings have not been assigned by NFPA, the [Chemical Hazard Reference Information](#) sheet may be used to assign the NFPA hazard ratings based on the information found in the chemical's MSDS. Both of these formats have specific sections that address the four hazards. Listed below are the sections that contain the required information.

Color Code	Definition	ANSI	OSHA
Health (blue)	LD ₅₀ Oral Rat	Sec. 11, Toxicological Information	Sec. VI, Health Hazard Data
	Corrosive / Irritant	Sec. 3, Hazard Identification	Sec. VI, Health Hazard Data
Flammability (red)	Flash Point	Sec. 5, Fire Fighting Measures	Sec. IV, Fire & Explosion Hazard Data
Reactivity (yellow)	Stability	Sec. 10, Stability and Reactivity	Sec. V, Reactivity Data
Special Hazards (white)	Water Reactive	Sec. 10, Stability and Reactivity	Sec. V, Reactivity Data
	Acid / Alkali	Sec. 9, Physical/Chem Properties	Sec. VI, Health Hazard Data
	Corrosive	Sec. 3, Hazard Identification	Sec. VI, Health Hazard Data
	Oxidizer	Sec. 10, Stability and Reactivity	Sec. V, Reactivity Data

The properly completed HMIS label will provide all personnel with the necessary hazard warnings and meet the University's hazardous materials requirements.

If you have a question regarding completing this label, please contact Environmental Health and Safety at 882-7018 or visit our web site at <http://web.missouri.edu/~muehs/>.