



fast facts

advancing safety, health, and workplace rights in the legislative branch

October 2007

Safe Use and Handling of Hazardous Chemical Products

Many areas of the Capitol complex contain chemicals that are potentially hazardous to employees' health. These items include cleaning agents, welding and cutting supplies, acids, alkalis, finishing products, and flammables. Employees can be over-exposed to some chemicals through inhalation and some—like carbon tetrachloride—can be absorbed through the skin. Others—like lead—can pose a significant risk when amounts of hand contaminant get transferred to food, cigarettes or any other item put in the mouth.



Figure 1: Damage to container labels reduces their usefulness and can lead to mishaps.

Hazard Communications Programs

Employers are required to inform workers of the potential dangers of hazardous chemicals through implementation of a written "Hazard Communication Program," or HCP. The HCP requires employers to make a list of all products in the work area

that contain hazardous chemicals and to obtain a material safety data sheet for each. By law, labels must identify hazardous chemicals and provide hazard warnings for physical and health hazards. If a chemical is transferred into another container, that container must also be properly labeled. Transferred chemicals that are expected to be used the same day by the person who transferred them do not need to be labeled.

Employers should use less hazardous chemicals when effective substitutes are available, and make sure appropriate protective measures are available. Further, the Office of Compliance suggests that an effective hazard determination, conducted as part of the HCP, be integrated with the chemical purchasing and distribution processes.

Material Safety Data Sheet

An important part of any HCP is for employers to make available to employees a "Material Safety Data Sheet," or MSDS, of each hazardous chemical product in the work area. An MSDS includes information about the identity of hazardous chemicals in the product, flammability and other physical hazards, possible health effects, recommended exposure controls (including personal protective equipment), what to do if a person comes in contact with the chemical, how to properly handle it, and what to do if the material is spilled or ignited.

Although MSDS formats may vary, all are required to contain certain categories of information: a list of ingredients, their exposure limits, signs and symptoms of exposures, medical conditions that can be



Figure 2: A well-organized MSDS binder.

aggravated by exposure, its routes of entry into the body, precautions for safe handling and use, proper personal protective equipment and other controls, and emergency and first aid procedures.

Employers are also responsible for ensuring that MSDSs are available to employees and for ensuring all containers have adequate labels. MSDSs are often provided in alphabetical order within a binder kept in an area of the work area where they can be quickly used, especially during an emergency. Each employee must also be provided with effective information and training on the nature of physical and health hazards present, operations where hazardous chemicals are present during routine and non-routine tasks, and the location and availability of the written HCP. Employees must be provided with documented information and training at the time of their initial assignment, and whenever a new physical or health hazard is introduced into their work area.

Proper Handling and Storage

Proper handling and storage also plays an important role in chemical safety. Chemicals need to be handled, transported and stored in a responsible manner to ensure the chemical stays in its container. Only compatible materials should be stored together. For example, strong oxidizers should not be stored with organic materials. All flammable liquids and aerosols need to be stored in specially designed flammable storage cabinets (See 29 CFR 1910.106(d)). See the Office of Compliance's "Pressurized Cylinders" Fast Fact for more information on compressed gases.



Figure 3: An unlabeled bottle in a storage cabinet for flammable chemicals risks misuse or consumption.

fast stats

- In 2004, 17,880 injuries involving days from work due to contact with chemicals and chemical products were reported by U.S. Bureau of Labor Statistics, and 126 fatalities due to contact with chemicals and chemical products were reported.
- During Office of Compliance inspections of the 109th Congress, the following violations involving chemical hazards and deficient Hazard Communication Programs were found:
 - Four locations with no Material Data Safety Sheets for specific chemicals
 - Six locations with deficient Hazard Communication Programs
 - Seven locations with improper labeling of chemicals
 - One location with no readily available Material Data Safety Sheet
 - 15 locations were issued a Notice of Serious Deficiency Needing Prompt Attention
- Important Standards
 - 29 CFR 1926.59: Hazard Communication
 - 29 CFR 1910.1200: Hazard Communication
 - 29 CFR 1910.1450: Occupational Exposure to Hazardous Chemicals in Laboratories



Peter Ames Eveleth
General Counsel
Rachel Berg Scherer
Editor

If you spot a safety hazard in your legislative branch workplace, contact the Office of Compliance to report it:
Room LA 200, John Adams Building
110 Second Street, SE
Washington, DC 20540
t/ 202-724-9250; tdd/ 202-426-1912; f/ 202-426-1913
Recorded Information Line/ 202-724-9260
www.compliance.gov

The Office of Compliance advances safety, health, and workplace rights in the U.S. Congress and the Legislative Branch. Established as an independent agency by the Congressional Accountability Act of 1995, the Office educates employees and employing offices about their rights and responsibilities under the Act, provides an impartial dispute resolution process, and investigates and remedies violations of the Act.

This information does not constitute advice or an official ruling of the Office of Compliance or the Board of Directors and is intended for educational purposes only. For further information, please refer to the Congressional Accountability Act (2 U.S.C 1301 et seq.) and the regulations issued by the Board, or you may contact the Office of Compliance.