HAZARD COMMUNICATION

If you come into contact with hazardous chemicals in your workplace each day, you are definitely not alone. One out of every four workers contacts hazardous chemicals on the job. In many cases, the chemicals you deal with may be no more dangerous than those you use at home. But in the workplace, concentrations are likely to be higher and exposure time longer. Thus, potential hazards are greater on the job.

WHERE ARE THE REGULATIONS?

The Occupational Safety and Health Administration (OSHA) have issued a regulation to help control chemical exposure on the job. The regulation is called the hazard communication standard, but is more commonly called "hazcom" or the "Right to Know Law." It can be found at 29 CFR 1910.1200.

The standard says you have a right to know what chemicals you are working with or around.

The hazcom standard requires that all chemicals in your workplace be fully evaluated for possible physical or health hazards. And, it mandates that all information relating to these hazards be made available to you.

The areas specifically covered in the standard include:

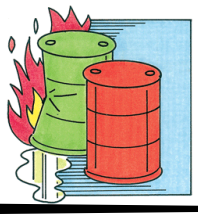
- Determining the hazards of chemicals.
- Material safety data sheets.
- Labels and labeling.
- A written hazard communication program.
- Employee information and training.
- Trade secrets.

The hazard communication standard doesn't apply to hazardous waste/substances regulated by the Environmental Protection Agency, biological hazards, tobacco products, many wood or wood products, or to food, cosmetics, or certain drugs.

WHAT ARE PHYSICAL AND HEALTH HAZARDS?

Physical hazards are exhibited by certain chemicals due to their physical properties - flammability, reactivity, etc. These chemicals fall into the following classes:

- Flammable liquids or solids.
- Combustible liquids.
- Compressed gases.
- Explosives.



- Organic peroxides.
- Oxidizers.
- Pyrophoric materials (may ignite spontaneously in air at temperatures of 130°F or below).
- Unstable materials.
- Water-reactive materials.

A *health hazard* is a chemical that may cause acute or chronic health effects after exposure.

An acute health effect usually occurs rapidly, following a brief exposure. A chronic health effect is long-term and usually follows repeated long-term exposure.

What kinds of chemicals cause health hazards?
Some examples of chemicals which exhibit health hazards are:

Type of chemical:

- Carcinogens (cause cancer) (examples: formaldehyde or benzene)
- Toxic agents (poisonous) (examples: lawn and garden insecticides, arsenic compounds)
- Reproductive toxins (examples: thalidomide or nitrous oxide)
- Irritants (examples: bleaches or ammonia)
- Corrosives (cause burns) (examples: battery acid, caustic sodas)
- Sensitizers (cause allergic reactions) (examples: creosote or epoxy resins)
- Organ-specific agents (act on specific organs/parts of body) (examples: sulfuric acid (affects skin), or asbestos (affects lungs))

THE MATERIAL SAFETY DATA SHEET

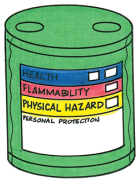
A material safety data sheet (MSDS/SDS) is a fact sheet for a chemical which poses a physical or health hazard in the workplace. MSDS/SDSs must be in English and contain certain information:

- Identity of the chemical (as used on the label).
- Physical and chemical characteristics (e.g., vapor pressure, flash point).
- Physical hazards.
- Health hazards.
- Primary routes of entry.
- PELs, TLVs, or other exposure limit used or recommended by the MSDS/SDS preparer.

- Whether it is a carcinogen.
- Precautions for safe handling and use.
- Control measures (e.g., engineering controls, work practices).
- Emergency and first aid procedures.
- Date of preparation of the latest revision.
- Name, address, and telephone number of manufacturer, importer, or other responsible party.

Your organization must have an MSDS/SDS for each hazardous chemical it uses. Copies must be kept where you can use them during your work shift. When employees must travel between workplaces during the day, MSDS/SDSs may be kept at a central location.

LABELS AND LABELING REQUIREMENTS



Containers of hazardous chemicals must be labeled in English. Information may also be presented in other languages for non-English speaking employees. It is required that labels on in-coming containers contain the following information:

- Identity of the hazardous chemical.
- Appropriate hazard warnings.
- Name and address of the chemical manufacturer, importer, or other responsible party.

On individual stationary containers you may use signs, placards, batch tickets, or printed operating procedures in place of labels.

Some employers opt to standardize their labels for hazardous chemicals. This requires re-labeling each container of a hazardous substance as it enters the plant. Some organizations choose to do this because their employees and any emergency responders then have a uniform labeling format to use with easily recognizable hazard warnings.

Many systems for labeling hazardous chemicals have been developed such as the Hazardous Material Information System.

THE WRITTEN HAZARD COMMUNICATION PROGRAM

Your employer is required by the hazard communication standard to have developed and implemented a written hazard communication program.

Your organization's written program needs to include:

- A list of the hazardous chemicals known to be present in your workplace.
- How the MSDS/SDS requirements are being met.
- What type of labeling system is used?

- Detailed information on training compliance.
- Methods your employer will use to inform you of the hazards of non-routine tasks and such things as unlabeled piping.
- Methods your organization will use to inform other employers of workers on your site, such as service representatives, repairmen, and subcontractors.

YOU MUST BE TRAINED

You must be trained at the time of your initial employment or assignment, as well as whenever a new hazard is introduced into your workplace.

Your training must contain all of the following elements:

- **Methods or observations** used to detect the presence or release of hazardous chemicals in your work area.
- **Physical/health hazards** of chemicals in your work area.
- **Measures you can take to protect yourself** from hazards, including work practices and personal protective equipment.
- **Details of your employer's hazard communication program**, including complete information on labels and MSDS/SDSs.

WORK AT WORKING SAFELY

Take your hazcom training seriously. Learn about MSDS/SDSs, labeling, your employer's written program, measures to protect yourself, and what hazardous chemicals you work with.