



URBAN AG COUNCIL
GEORGIA



Provided for UAC members by the Georgia Urban Ag Council & Snellings Walters Insurance Agency

Hazard Communication Employee's Right to Know

Objective

To inform employees about the chemical hazards they face in the workplace, Material Safety Data Sheets (MSDS), and labeling requirements.

Trainer's note

Review the following information with workers. Discuss the different chemicals that each employee works with and the associated hazards. Have a copy the MSDS's available to aid in the instruction. Hazard communication is the most-cited OSHA standard.

Background

On any given day, 32,000,000 workers are potentially exposed to chemical hazards in the workplace. There are an estimated 575,000 existing chemicals, with more added daily. Chemical hazards cause or contribute to heart, kidney, and lung damage. Chemicals cause fires, explosions and other serious accidents.

Chemicals in your workplace

There are two different types of hazards that employees may encounter:

- Physical hazards
 - Produce a dangerous situation outside the body (burns, explosions, etc.)
- Health hazards
 - Two types:
 - Acute health hazards do their damage rapidly from short-term exposure
 - Chronic health hazards affect the body slowly through long-term exposure

Ways employees can protect themselves from injury

- Training
- Use of a less hazardous substance

- Personal protective equipment
- Knowing location of first aid washes or showers
- Handling and storage procedures
- Additional information may also be obtained from the MSDS

Material Safety Data Sheets (MSDS)

There must be a current MSDS readily available for each chemical used in the workplace. The MSDS must give employees and employers detailed information about the hazards of specific materials and how to control them. Each MSDS should include:

- The common name and the chemical name of the material, unless this information is a trade secret
- The name, address and phone number of the manufacturer
- Emergency numbers you can use to get immediate information on specific hazards
- The date the form was written or last revised
- Any hazardous ingredients in the chemical and information about them unless it is a trade secret

Each MSDS also should include:

Fire and explosion information

- The material's flash point (lowest temperature at which the chemical is giving off enough vapor to burn if ignited. Gasoline has a flash point of -45 degrees)
- Auto ignition temperature
- Upper and lower flammability limits
- Material to use to put out the fire
- Special fire-fighting requirements
- Fire/explosion hazard

Chemical reaction dangers

- Whether the chemical itself is stable or unstable
- Conditions and other materials which can cause reaction with this chemical
- Dangerous substances that can be produced when it reacts (i.e. mixing chlorine and ammonia together produces a toxic gas)

Measures to control hazards

- Engineering controls
- Personal Protective Equipment
- Safe storage of chemicals
- Safe handling practices

Health hazard information

- Safe exposure limits, such as permissible exposure limits (PEL) and the threshold limit value (TLV)
- Acute and chronic symptoms of exposure

- Chemical's main route of entry into the body (inhalation, ingestion, absorption, or injection)
- Medical conditions that can be made worse by exposure
- Whether the chemical can cause cancer
- Emergency first-aid treatments

How to deal with spills

- Clean-up techniques
- Personal protective equipment to be used during clean-up
- How to dispose of waste materials

Labeling requirements

Warning labels are your first indication of how to approach and handle the chemical. They alert you to the dangers or hazards present, but they might not tell you everything you need to know about controlling these dangers.

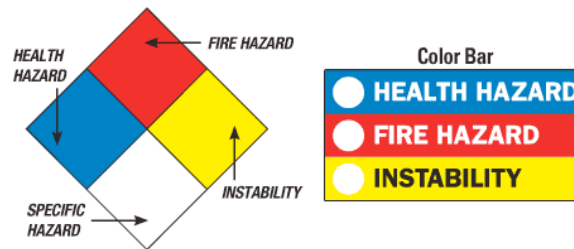
Labels are required on:

- All containers of hazardous material in the workplace.
 - This includes any secondary containers such as tip and pours or gas cans.
- Containers being shipped from one workplace to another.

Warning labels must give the following information:

- The name of the material
- All physical hazards
- All health hazards

Below is an example the National Fire Protection Agency labels that are more commonly seen:



RATING EXPLANATION GUIDE		
HEALTH	FLAMMABLE	INSTABILITY
Recommended Protection	Susceptibility to Burning	Susceptibility to Energy Release
4 Special full protective suit and breathing apparatus must be worn	4 Very Flammable	4 May detonate under normal conditions
3 Full protective suit and breathing apparatus should be worn	3 Ignites under normal temperature conditions	3 May detonate with shock or heat
2 Breathing apparatus with full face mask should be worn	2 Ignites with moderate heating	2 Violent chemical change but does not detonate
1 Breathing apparatus may be worn	1 Ignites when preheated	1 Not stable if heated use precautions
0 No precautions necessary	0 Will not ignite	0 Normally stable

Review the following points

- Know the hazards of the specific chemicals that you will be working with in your workplace.
- Know where your company's MSDSs are kept.
- Know how to read and understand an MSDS.
- Labels are required on all containers in the workplace.

Quiz

1. Every employee must be trained on the chemicals in their workplace and the hazards of each.
2. An MSDS will provide you with the chemical characteristics, fire fighting measures and first aid measures.
3. MSDS's are to be readily available for each employee.
4. If you are pouring a chemical into a container for your use that day, it not necessary to place a label on the container.
5. Labels must contain the following information: chemical name and the appropriate hazard warnings.

Answer key

1. True
2. True
3. True
4. False
5. True