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# **Training Curriculum**

**Hazard**

**Communication**

**Training**

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# Training

## Hazard Communication Training

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### Training Goal:

Hazard communication training explains and reinforces information already provided through hazard warning labels and material safety data sheets (MSDSs). Labels and MSDSs will be made useful when workers understand the provided hazard information and know what to do to avoid or minimize chemical exposure and any adverse effects associated with them.

### Safety Responsibility:

Ensure that employees understand chemical storing, handling, and potential exposures situations.

### Module A: Types of chemicals in the workplace

Discuss the different types of chemicals present in the workplace and their hazard characteristics.

Contents: Physical and health hazards of chemicals

- Discuss the different states that chemicals may take; give examples of each (solids, liquids, gases, semi-solids).
- Familiarize employees with the different types of chemicals and the major hazards associated with them (physical hazards, health hazards).
  - Health Hazards: Carcinogenic, Toxic, Mutagenic, Teratogenic, Sensitizing Agent, Corrosive, Irritant.
  - Physical Hazards: Combustible, Flammable, Pyrophoric, Explosive, Organic Peroxide, Oxidizer, Compressed Gas, and Reactives.

Trainer's Notes: Use a chemical dictionary to help in this part of the lecture.

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## **Module B: Chemical terminology**

Discuss chemical terminology as it relates to the chemicals used in the facility operations.

Contents: Lecture on chemical terminology

- Discuss chemical terminology pertinent to operations at the worksite. Where applicable, incorporate time weighted averages and permissible exposure limits.
- Explain definitions in language employees will understand.
- Explain toxicity standards, what they are based on and what they mean in real-world terms and discuss toxicology's relationship with dose. Explain the difference between chronic and acute effects of chemicals.

Trainer's Notes: Discuss Appendix A of 29 CFR 1910.1200

## **Module C: Safety data sheets**

Review the information contained on safety data sheets.

Content: Lecture and conduct hands-on exercises with SDSs.

- Discuss material safety data sheets and their purpose.
- Explain the types of information that can be found on the SDS.
- Tell where the SDSs are located within the workplace, and how the employees can access them.

Trainer's Notes: Discuss the different sections required on the SDS and use a work exercise to evaluate how quickly employees can access information on the MSDS (Identity, Physical hazards, Health hazards, Routes of body entry, PEL, Carcinogenic factors...).

## **Module D: Personal Protective Equipment**

Conduct an overview of Personal Protective Equipment.

Contents: Lecture and conduct hands-on review of PPE.

- Cover PPE section in the SDS but point out the context of its use in your facility. PPE as stated on the SDS is typically set for worst case scenarios and may not be entirely applicable to an individual's work context. Engineering controls may eliminate some PPE requirements.

Trainer's Notes: Reference the Personal Protective Equipment Policy for complete PPE training.

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## **Module E: First aid and emergency procedures**

Revisit first aid and emergency procedures.

Contents: Lecture on Medical Emergency and Medical and First Aid procedures.

- a) Inform workers of first aid and emergency procedures to be put in action during:
  - contamination,
  - spills, or
  - overexposure events (See emergency action plan for other contingencies).
- b) Describe the contents of the first aid kit (or room) and its proper use.
- c) Discuss written procedure for sudden and unusual incidents such as chemical spills onto clothing, skin, or work area; or air contamination.

Trainer's Notes: Talk about 29 CFR 1910.151- For a full training reference, see the emergency action plan.

## **Module F: Labels and Pictograms**

Review current use of labels.

Contents: Lecture on Hazard Communication Labels and the company's hazard communication policy.

- Remind workers what information they will find on hazard warning labels, placards, or posters.
- Go over the details of any warning system used facility wide for hazardous chemical containers (e.g., GHS, NFPA, HMIS, or other systems; hand out written description or post in the workplace).

Trainer's Notes: Discuss where labels can be found, who is responsible for placing or replacing labels, and how this is to be done.

**Special Note:** As the safety trainer for your company, you must make sure that workers exposed to hazardous chemicals and their supervisors are suitably trained in the safe use of any such chemicals.

In addition, you must make sure that these employees understand what chemical by-products, if any, result from any chemical mixing that occurs as part of their jobs.

Before your training, consider other safety training issues relative to your hazardous chemical operations such as:

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- Spill cleanup procedures for accidental chemical spills,
  - Chemical process management activities under Process Safety Management,
  - Personal protective equipment needs (As detailed in the PPE policy), and
  - Storage and handling requirements of hazardous materials.

Employees must be informed of the status of their exposure records each year.

Keep a copy of your training materials or a training outline so that you have a guide for your next program on chemical safety.