

Module 2 of 12

Hazard Communication Standard (Employee Right-to-Know)

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The purpose of OSHA's Hazard Communication Standard (HCS) (also called the Employee Right-to-Know law) is to provide employees with information pertaining to potential exposures to and dangers of hazardous materials in the workplace. You may have already been trained in HCS prior to starting your job, so this information will serve to refresh your memory.

Employee Training

All employees must receive HCS training before working with hazardous materials. In some states, annual training is required. Your supervisor (or trainer) must document your training.

This training must provide you with a general understanding of :

- The HCS and your rights;
- Hazardous materials to which you are or could be exposed;
- Location of hazardous materials at your facility;
- Health effects of hazardous-materials exposure;
- Detection of hazardous-materials exposure;
- SDSs (safety data sheets) formerly called Material Safety Data Sheets (MSDSs);
- Personal protective equipment (PPE); and
- Your facility's written Hazard Communication Plan.

Management's Responsibility

The management of your facility must:

- Ensure all shop employees are properly trained.
- Prepare an inventory of all hazardous products and materials used at the facility that require an SDS.
- Ensure a current SDS is available for each hazardous material. You must be informed as to where the SDSs are kept at your location so you can refer to them prior to handling hazardous

materials or when you have questions about how to use a material safely.

- Ensure all containers, tanks, boxes, bottles, cans, etc., are properly labeled, as described below.
- Develop a written Hazard Communication Plan that describes how the HCS will be implemented at your facility.

Materials Covered Under the Hazard Communication Standard

| | |
|-------------------------------|-------------------------------|
| <i>Gasoline</i> | <i>Battery acid</i> |
| <i>Diesel fuel</i> | <i>Aerosol products</i> |
| <i>Kerosene</i> | <i>Welding rods and gases</i> |
| <i>Fuel oil</i> | <i>Cleaning compounds</i> |
| <i>Lubricating oils</i> | <i>Automotive fluids</i> |
| <i>Windshield-wiper fluid</i> | <i>Antifreeze</i> |
| <i>Paints</i> | <i>Flammable materials</i> |
| <i>Glues</i> | <i>Powders and dusts</i> |
| <i>Solvents</i> | <i>Metals</i> |
| <i>Strippers</i> | <i>Compressed gases</i> |
| <i>Acids and caustics</i> | <i>Pesticides</i> |
| <i>Batteries</i> | <i>Fertilizers</i> |

Hazardous by-products, such as those listed below, may also be produced at your location. By-products from the use of materials/products will be described on the SDS.

Welding fumes (oxides of iron, aluminum and zinc; ozone)
Asbestos dust
Solvent and gasoline vapors
Metallic dusts
Automotive/diesel exhaust

Automotive and diesel-engine exhaust contains fine-particulate matter, hydrocarbons and carbon monoxide (CO). Excessive exhaust in poorly ventilated areas can be very irritating, noxious and even deadly. Diesel exhaust, especially, creates a fine dust that spreads everywhere.

Some of the effects from exposure to CO include reduced tolerance for exercise, impaired mental function, nausea and headaches. Extreme exposures lead to unconsciousness and death. To avoid potential health hazards from automotive or diesel exhaust, follow these recommended practices:

- Make sure adequate ventilation is provided by use of a flexible hose that vents to the outside. While running an engine when doors are closed, attach the flexible hose to the exhaust.

- Open doors, when possible, to allow for cross ventilation. The use of wall fans does not ensure elimination of CO and exhaust pollutants.
- Avoid running engines except when necessary, especially when the maintenance facility doors are not open.

Some of the most common hazardous materials in the paint and body shop covered by the HCS are described below:

Many topcoats, hardeners, glass or punchweld primers contain *isocyanates*, an extremely toxic class of compounds. Overexposure to isocyanates can cause eye and throat irritation. Long-term overexposure can cause permanent damage to the lungs, central nervous system and brain. They are mostly found in the dusts from sanding, grinding etc., but may also be present as a gas in the air.

Aerosol cleaners for plastic repair contain *toluene* and *xylene*. These attack the liver, kidneys and nervous system.

Buffing compounds and butyl tapes contain *crystalline silica*, a lung irritant that can cause lung cancer.

Wheel cleaners contain acid such as *hydrofluoric acid*. It can irritate and burn the skin and eyes.

Adhesives and rubberized undercoatings contain thinners such as *acetone* and *1,1 trichloroethane*.

Paints contain mineral spirits. Orange, yellow and red paints on trucks and industrial equipment can contain *lead chromate*, presenting a hazard when sanding, grinding or applying.

Solvents may contain mineral spirits, alcohols or other hydrocarbons.

Paint strippers, cleaners and adhesives may contain *methylene chloride*, another dangerous compound that causes cancer.

Body parts (coated steel, painted parts, bumpers, plastic parts, etc.) subjected to cutting, grinding, sanding or welding will also produce hazardous dusts and fumes. The worker needs to be aware of this, what is in the coating or plastic and what protective measures to take.

HCS also covers **fire extinguishers, steel coated with oil, sandpaper and grinding wheels. Coated, metal and plastic parts** may also be covered, depending on how the materials are used. If they are used in a fashion that could create a hazardous exposure, such as grinding, welding or cutting, they are covered.

SDSs are not required for hazardous waste or by-products. However, disposal methods and hazards of spent or used products and hazardous fumes must be mentioned in the SDS.

Exemptions include consumer-type products (those that can be purchased at a retail store) in small quantities and used in a fashion as one may use a product at home.

Proper Container Labeling

Labeling, tagging or marking of all containers of hazardous materials must include the product name, name and address of the manufacturer or supplier, a description of the hazard and the PPE required. This is usually provided by the supplier or manufacturer.

For containers not properly labeled, or for materials to be stored in nonoriginal containers, follow your facility's labeling policy. This should include affixing an OSHA approved label complying with international standards. Your supervisor will show you these labels to make sure you understand them and how to use them. Temporary containers are not required to be labeled, if the contents are emptied by the end of a work shift.

Testing

Take the short quiz provided by your supervisor. You pass when you can answer 12 of the 15 questions (80%). Find the correct answers to any you missed.

Other Training Available

As part of your training on this topic, your supervisor may provide live or video training, provide for group discussion with questions and answers and give in-shop demonstrations. Your supervisor will show you SDSs and examples of hazard labeling.



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