BALL STATE
UNIVERSITY

An Environmental Health and Safety Office

Quick Guide to the

OSHA Hazard Communication Standard for General Industry

Contents

What is Hazard Communication?

The essence of hazard communication is a warning. We use thousands of chemical products throughout our lives but most of us couldn't tell safe ones from hazardous ones without a warning — the familiar skull and crossbones, for example. The warning tells us the chemicals in a product can harm us if we don't use it properly.

Why do we have workplace hazard communication rules?

The rules make sure that workers who use hazardous chemicals know how the chemicals can harm them and how to use them safely, and how to respond to spills, releases, or exposures.

Who's affected by the rules?

The rules affect most employers whose employees may be exposed to hazardous chemicals. There are three different hazard communication rules. The one that affects you depends on your industry:

Ball State falls under the General Industry Standard except when work being performed (excavations, etc.) is more akin to construction (or agricultural) activities. The requirements, so far as communication of chemical hazards, is much the same in any type of work though.

OSHA's hazard communication rules

Your industry	Your rule
Agriculture	29 CFR 1928.21 (a)(5)
Construction	29 CFR 1926.59
General Industry	29 CFR 1910.1200

Understanding the Hazard communication process

Hazard communication is a process that involves chemical manufacturers, importers, distributors, and you, the **supervisor**.

Steps in the hazard communication process	
1	Chemical manufacturers or importers determine if the chemicals they produce are hazardous. The manufacturers or importers prepare **safety data sheets** (SDS) that describe the chemical's hazards.
2	Every hazardous chemical that manufacturers or importers sell must have an SDS and a **label** that identifies the chemical and warns of its hazards.
3	Your workplace purchases chemical products from a manufacturer, distributor, or importer.
4	You prepare a **written hazard communication plan** that identifies the hazardous chemicals at your workplace and describes how you will use SDS, warning labels, and training to inform your employees.

On average, about 1/3 of manufacturer SDSs are revised and redistributed each year. Be sure to keep your SDS files or binder up to date with the most current!

Retraining of employees will be necessary as the GHS system is implemented – this will affect hazard categories, SDSs, labels, and associated hazard training for employees.

What's the difference between a hazard communication "plan" and a hazard communication "program?"

BSU has a written Hazard Communication "Program"-- each Department, shop, or worksite must have its own Hazard Communication "Plan" [An inventory of hazardous chemicals and the SDSs for each product or chemical.]

What Must I Do To Comply?

Prepare a written hazard communication plan

A hazard communication plan identifies the hazardous chemicals at your workplace and describes how you will inform and train your employees about the hazards.

You must prepare a hazard communication plan if your employees use or may be exposed to hazardous chemicals.

How to prepare your plan:

Identify the chemicals that your employees could be exposed to by developing a list.

- If a chemical is hazardous and an employee could be exposed to it, put it in the inventory. Include hazardous chemicals in all forms — liquids, solids, gases, vapors, fumes, and mists.
- Update your inventory when you receive new chemicals.
- Make sure there is a safety data sheet for each chemical in the inventory.

Identify containers that have hazardous chemicals.

Describe how you will make sure that each container has a label that identifies the chemical and warns of its hazards.

Determine where you will keep material safety data sheets.

Keep safety data sheets where they are readily available to all employees. Identify the location if you store them in a paper file. Describe how employees will access them electronically.

Describe how you will train your employees about the chemicals' hazards.

Include how employees can protect themselves from hazards, what they need to know about safety data sheets and warning labels, and where they can review safety data sheets.

Describe how you will inform employees who do non-routine tasks about the hazardous chemicals they may be exposed to.

Include the tasks and what employees must do to minimize exposure.

Describe how you will inform contractors' employees about the hazardous chemicals they may be exposed to. Include where employees can find safety data sheets and how they can recognize warning labels on hazardous chemicals.

Make sure that safety data sheets are current and readily available for employees to use

- You must have a current safety data sheet for each hazardous chemical product that your employees use or may be exposed to.
- Your employees must be able to review safety data sheets in their work area at any time.
- It's OK to keep safety data sheets in a notebook and on a computer — but employees must be able to get the information immediately in an emergency.
- Make sure that your inventory of hazardous chemicals is current, there's a safety data sheet for each chemical in the inventory, and incoming hazardous-chemical containers have safety data sheets.

You need to keep safety data sheets for hazardous chemicals that you're no longer using. You must keep records of the chemicals, where they were used, and the years they were used, for at least 30 years.

For information about keeping records, see "Access to employee exposure and medical records," See 29 CFR 1910.1020(d) (ii)(B).

Example: A Safety Data Sheet

KOPPERS

SAFETY DATA SHEET

PRODUCT NAME: **Copper Naphthenate Pressure Treated Wood/Poles/Piling**

1. PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED BY:
Koppers Utility & Industrial Products
P.O. Box 1124
Orangeburg, SC 29116
(803) 534-7467

DESCRIPTION/USE: Restricted Use Treated Wood Products
EMERGENCY NUMBER: 800-424-9300 (CHEMTREC)
SYNONYMS: Copper Naphthenate Treated Materials, Poles, Pilings, and Posts

2. HAZARDS IDENTIFICATION

DANGER!

Treated and untreated wood dust are classified as: carcinogenic, possible respiratory and skin sensitizer.

If mixed with air in the presence of an ignition source, *sawing, sanding or machining* material may generate a dust that could be a potential explosion hazard.

	Hazard Statements	Category
Physical Hazards:	None	
Skin Irritation:	Causes mild skin irritation	3
Eye Irritation:	Treated and untreated wood dust causes eye irritation	2B
Respiratory Sensitization:	Treated and untreated wood dust may cause allergy or asthma symptoms or breathing difficulties if inhaled	1
Skin Sensitization:	May cause an allergic skin reaction due to prolonged and/or repeated contact with treated or untreated wood dust. *(Various species of untreated wood dust can elicit allergic type skin irritation in sensitized persons.)*	1
Carcinogenicity:	May cause cancer due to long term inhalation of treated or untreated wood dust above threshold limits	1A
Specific Target Organ Toxicity (Single Exposure):	May cause respiratory irritation	3

Precautionary Statements - Prevention

- Do not cut or machine wood (generate wood dust) until all safety precautions have been read and understood.
- Wear protective gloves, long sleeve shirt and pants when handling treated or untreated wood.
- Wash face, hands and any exposed skin thoroughly after handling and before eating, drinking or using the restroom
- Contaminated work clothing should not be allowed out of the workplace
- Cut or machine treated/untreated wood only outdoors or in a well-ventilated area
- Avoid breathing dust when cutting or machining wood
- In case of inadequate ventilation and levels exceed the recommended exposure limits, wear a NIOSH approved P95 or better particulate filter respirator

Label hazardous chemical containers

Every hazardous chemical container at your workplace must have a legible label, in English, that names the chemical and warns of its hazards.

Don't remove or deface the labels on containers that you receive from manufacturers, importers, or distributors. The manufacturer name should also be on the container or label – always if in transportation.

Manufacturers, importers, and distributors must ensure that each hazardous chemical product has a label that includes the chemical's name, a hazard warning, and a contact for more information about the product.

The warning label must identify the chemical

A common chemical name or a code name is acceptable. The label must also include a warning such as **DANGER** or the familiar skull and crossbones.

The name on the label must match the name on the safety data sheet and the name on your hazardous chemical list.

The labels on incoming chemical products will include other pictographs, hazard statements, etc. as manufacturers and importers adjust to the new OSHA and GHS standards for container labeling.

Train employees when you hire them (within 30 days) and whenever they're exposed to a new chemical hazard or process.

Cover the following topics:

- Where to find and how to read your hazard communication plan, the inventory of hazardous chemicals, and safety data sheets;
- Jobs and processes in which hazardous chemicals are used;
- The chemicals' physical and health hazards;
- The meaning of warning labels on chemical containers that contain hazardous substances;
- How to recognize emergencies involving hazardous chemicals; and,
- The procedures, equipment, and work practices that control exposure and to use in the event of an emergency.

Who can train employees? ***Choose a person who understands the topics and knows how to do the training. Forms such as on the following page should document that employees have received hazard communication training.***

The Ball State Environmental Health and Safety Office can assist in, or provide, the Hazard Communication training. It will be necessary to review all of the shop or worksite SDSs in order to identify the hazards presented by the chemicals used, and provide training specific to the physical and health hazards identified.

Remember, the training must be specific to the hazards presented by the chemical products in the work place. New hazard class = new training requirement for the worker.

Example: Training acknowledgement form

Use a form such as this one to document that an employee has been trained about hazardous chemicals used in the workplace as required by OSHA hazard communication rules.

I have been informed about the hazardous chemicals that I may be exposed to during my work and I have received training on the following topics:

- An overview of the requirements in Indiana's OSHA's hazard communication rules.
- Hazardous chemicals present in the workplace.
- The written hazard communication plan.
- How to read labels and review safety data sheets.
- Physical and health effects of the hazardous chemicals.
- Methods to determine the presence or release of hazardous chemicals in the work area.
- How to reduce or prevent exposure to these hazardous chemicals through use of exposure controls/work practices and personal protective equipment.
- Steps we have taken to reduce or prevent exposure to these chemicals.
- Emergency procedures to follow if exposed to these chemicals.

Note to employee: This form becomes part of your personnel file; read and understand it before signing.

Employee: _____ Date:_____

Trainer: _____ Date:_____

Note to trainer: An outline and copy of any training materials used should be maintained to document the scope of the training.

Template: OSHA Hazard Communication Plan

The management of ***[this workplace]*** is committed to preventing accidents and ensuring the safety and health of our employees. We will comply with all applicable federal and state health and safety rules and provide a safe, healthful environment for all our employees. This written hazard communication plan is available at the following location for review by all employees: ***[location name]***.

Identifying hazardous chemicals

This inventory identifies all hazardous chemicals used at this workplace. ***[Include the inventory of hazardous chemicals]*** Detailed information about the physical and health effects of each chemical is included in a safety data sheet; the identity of each chemical in the inventory matches the identity of the chemical on its safety data sheet. Safety data sheets are readily available to employees in their work area. ***[Identify where and how employees can use safety data sheets]*.**

Identifying containers that have hazardous chemicals

All hazardous chemical containers used at this workplace will clearly identify the chemical on the label, and include an appropriate hazard warning and the manufacturer's name and address. No container will be released for use until this information is verified. ***[Name of person or job title]*** will ensure that all containers are labeled with a copy of the original manufacturer's label or a label that has the appropriate identification and hazard warning.

Keeping safety data sheets

Safety data sheets are readily available to all employees. Employees can review safety data sheets for all hazardous chemicals used at this workplace. ***[Identify the file location if they are stored in a paper file. Describe how to access them electronically]***.

The safety data sheets are updated and managed by ***[name of person or job title responsible for managing safety data sheets]***. If a safety data sheet is not available for a hazardous chemical, immediately notify ***[name of person or job title responsible for managing the safety data sheets]***.

Training employees about chemical hazards

Before they start their jobs or are exposed to new hazardous chemicals, employees must attend a hazard communication class that covers the following topics:

- An overview of the requirements in Indiana OSHA's hazard communication rules.
- Hazardous chemicals present in their workplace.
- The written hazard communication plan, and where it may be reviewed.
- How to read labels and review safety data sheets.
- Physical and health effects of the hazardous chemicals.
- Methods used to determine the presence or release of hazardous chemicals in the work area.
- How to reduce or prevent exposure to these hazardous chemicals through use of control/work practices and personal protective equipment.
- Steps we have taken to reduce or prevent exposure to these chemicals.
- Emergency procedures to follow if an employee is exposed to these chemicals.

After attending the training, employees will sign a form verifying that they understand the above topics and how the topics are related to the hazard communication plan.

Informing employees who do special tasks

Before employees perform special (non-routine) tasks that may expose them to hazardous chemicals, their supervisors will inform them about the chemicals' hazards. Their supervisors also will inform them about how to control exposure and what to do in an emergency.

Examples of special tasks that may expose employees to hazardous chemicals include the following: ***[include examples of special (non-routine) tasks]***

Informing contractors employees about hazardous chemicals

It is the responsibility of ***[name of person or job title]*** to provide contractors and their employees with the following information if they may be exposed to hazardous chemicals in our workplace:

- The identity of the chemicals, how to review safety data sheets, and an explanation of the container and pipe labeling system.
- Safe work practices to prevent exposure.

This person will also obtain a safety data sheet for any hazardous chemical a contractor brings into the workplace.

Other hazard communication resources

The complete written *Ball State University Hazard Communication Program* is available from the Environmental Health and Safety Office, Ball State University, 321 N. College Ave., Muncie IN 47306 (765-285-2807 or trhunt@bsu.edu). A copy of the *OSHA Hazard Communication Standard* is available in that Program manual, as well as other information on labeling of containers and employee training. The entire written program may be reviewed in its entirety by any employee upon request.

NEW GHS LABELING SYSTEM: PICTOGRAMS

Flame over circle	Flame	Exploding bomb
		
• Oxidizers	• Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self Reactives • Organic Peroxides	• Explosives • Self Reactives • Organic Peroxides
Skull and crossbones	**Corrosion**	**Gas cylinder**
		
• Acute toxicity (severe)	• Corrosives	• Gases under pressure
Health Hazard	**Environment**	**Exclamation mark**
		
• Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	• Aquatic Toxicity	• Irritant • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic effects • Respiratory Tract Irritation • Hazardous to Ozone Layer

ENVIRONMENTAL HEALTH AND SAFETY OFFICE
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QUESTIONS ?: CONTACT TERRY HUNT AT 285-2807