

The background features a solid orange color with various white line-art icons related to safety and hazard. These include a warning triangle, a flame, a biohazard symbol, a wrench, a syringe, a fire extinguisher, a magnifying glass, a stethoscope, gears, a lightning bolt, a medical cross, a caduceus, a test tube, a microscope, and a traffic cone. The word "GOSHAW" is written in large, white, outlined letters across the middle of the image.

# Hazard Communication

Presented by: TIG Advisors

# Learning Objectives

- After this training program, participants will understand:
  - The purpose of hazard communication programs
  - How to read a hazard communication label
  - How to access and read Safety Data Sheets (SDSs)
  - What hazardous chemicals are in our facility

# The Purpose of the Hazard Communication Standard

- Known as the Right to Know Standard.
- Employees have the right to know about the hazards of chemicals they work with every day and what precautions they need to take to remain safe on the job.

# Elements of a Hazard Communication Program

- Hazard communication programs typically include the following elements:
  - A written program
  - SDSs for all hazardous chemicals and an up-to-date list of chemicals
  - Chemical labeling
  - Employee training
- Employees have the right to review the written program, labeling and SDSs.
- Almost all businesses work with hazardous chemicals and must have a hazard communication program in place.



# What Is a Hazardous Chemical?

- A hazardous chemical, as defined by the Hazard Communication Standard (HCS), is any chemical that can cause a physical or health hazard.
- Many household chemicals are considered hazardous by OSHA and can be found in the workplace, including gasoline, paints, cleaners and oils.

# List of Hazardous Chemicals

- Employers must maintain a list of each hazardous chemical used in the workplace. There must also be a corresponding SDS for each chemical.
- Anytime new chemicals are used, they must be evaluated and added to the list. A new SDS should also be secured.
- Noncontainerized chemicals, such as those in pipes or created by processes such as welding, must also be included in hazardous chemical lists.

# SDSs

- SDSs are documents that provide information about the chemicals in our facility.
- SDSs are used to evaluate new chemicals, helping employees understand hazards associated with the chemical, how to dispose of the chemical and what to do in emergency situations related to the chemical.
- SDSs have a standardized, 16-section format. SDSs are available for all chemicals.

# SDS 16-section Format

- Section 1: Identification
- Section 2: Hazard(s) identification
- Section 3: Composition/information on ingredients
- Section 4: First-aid measures
- Section 5: Fire-fighting measures
- Section 6: Accidental release measures
- Section 7: Handling and storage
- Section 8: Exposure control/personal protection



# SDS 16-section Format, Cont.

- Section 9: Physical and chemical properties
  - Section 10: Stability and reactivity
  - Section 11: Toxicological information
  - **Section 12: Ecological information**
  - **Section 13: Disposal considerations**
  - **Section 14: Transport information**
  - **Section 15: Regulatory information**
  - Section 16: Other information
- Not regulated by OSHA



# Container Labels

- Labels are required for all chemical containers.
- While SDSs include detailed information on chemicals, labels are shorter, providing immediate warnings and other key information at a glance.



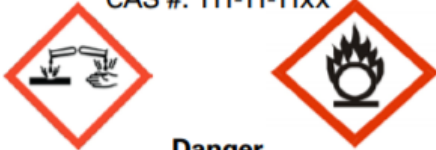
## Container Labels, Cont.

- All chemical containers must be labeled with the following:
  - Product identifiers
  - Signal words
  - A hazard statement
  - A precautionary statement
  - A pictogram
  - Supplier information

# Product Identifiers

- **Product identifiers** are how the hazardous chemicals are identified. Identifiers can include the chemical name, code number or batch number. They should match section one of the SDS.

**OXI252**  
(disodiumflammy)  
CAS #: 111-11-11xx



**Danger**  
May cause fire or explosion; strong oxidizer  
Causes severe skin burns and eye damage

Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Wear protective neoprene gloves, safety goggles and face shield with chin guard. Wear fire/flame resistant clothing. Do not breathe dust or mists. Wash arms, hands and face thoroughly after handling. Store locked up. Dispose of contents and container in accordance with local, state and federal regulations.

**First aid:**  
IF ON SKIN (or hair) or clothing<sup>o</sup>: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash contaminated clothing before reuse.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
Immediately call poison center.  
Specific Treatment: Treat with doctor-prescribed burn cream.

**Fire:**  
In case of fire: Use water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

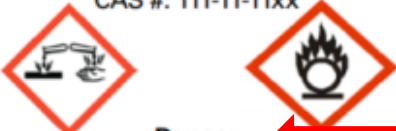
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# Signal Words

- **Signal words** indicate the relative severity of a hazard. Signal words can include “Danger” and “Warning.”
- Within a specific hazard class, “Danger” is used for the more severe hazards, and “Warning” is used for the less severe hazards. If there are multiple hazards with different signal words, it will default to just the more severe.

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# Hazard Statements

- **Hazard statements** describe the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard. Examples include, “Harmful if swallowed” and “Highly flammable liquid and vapor.”

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# Precautionary Statements

- **Precautionary statements** provide recommended measures that minimize or prevent adverse effects resultant of exposure to or the improper storage/handling of the hazardous chemical.
- There are four types of precautionary statements: Prevention (how to minimize risk), Response (what to do if there's a spill or exposure), storage and disposal.

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# Pictograms

- **Pictograms** are graphic symbols used to communicate specific information about the hazards of a chemical.

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# Pictograms, Cont.

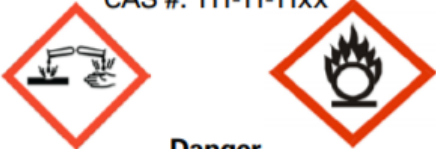
- There are nine different types of pictograms:
  - Health Hazard
  - Flame
  - Exclamation mark
  - Gas Cylinder
  - Corrosion
  - Exploding Bomb
  - Flame Over Circle
  - Environment
  - Skull and Crossbones

<b>Health Hazard</b>  <ul style="list-style-type: none"><li>• Carcinogen</li><li>• Mutagenicity</li><li>• Reproductive Toxicity</li><li>• Respiratory Sensitizer</li><li>• Target Organ Toxicity</li><li>• Aspiration Toxicity</li></ul>	<b>Flame</b>  <ul style="list-style-type: none"><li>• Flammables</li><li>• Pyrophorics</li><li>• Self-Heating</li><li>• Emits Flammable Gas</li><li>• Self-Reactives</li><li>• Organic Peroxides</li></ul>	<b>Exclamation Mark</b>  <ul style="list-style-type: none"><li>• Irritant (skin and eye)</li><li>• Skin Sensitizer</li><li>• Acute Toxicity (harmful)</li><li>• Narcotic Effects</li><li>• Respiratory Tract Irritant</li><li>• Hazardous to Ozone Layer (Non-Mandatory)</li></ul>
<b>Gas Cylinder</b>  <ul style="list-style-type: none"><li>• Gases Under Pressure</li></ul>	<b>Corrosion</b>  <ul style="list-style-type: none"><li>• Skin Corrosion/ Burns</li><li>• Eye Damage</li><li>• Corrosive to Metals</li></ul>	<b>Exploding Bomb</b>  <ul style="list-style-type: none"><li>• Explosives</li><li>• Self-Reactives</li><li>• Organic Peroxides</li></ul>
<b>Flame Over Circle</b>  <ul style="list-style-type: none"><li>• Oxidizers</li></ul>	<b>Environment (Non-Mandatory)</b>  <ul style="list-style-type: none"><li>• Aquatic Toxicity</li></ul>	<b>Skull and Crossbones</b>  <ul style="list-style-type: none"><li>• Acute Toxicity (fatal or toxic)</li></ul>

# Supplier Information

- **Supplier information** highlights the name, address and phone number of the chemical's manufacturer or supplier.

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# Workplace Labels

- When it comes to requirements for workplace labels, there is some flexibility.
- Your Company Name may use labels from the manufacturer or supplier, or create our own.
- Any labels Your Company Name creates will have the required information regarding product identifiers, words, pictures and symbols.

# Guidelines for Safe Handling

- Always read instructions, labels and SDSs. If you do not understand something, ask for clarification.
- Never mix chemicals unless directed to do so.
- Wear the required personal protective equipment (PPE).
- Store, handle and dispose of chemicals properly—follow the rules learned during training.
- Wash your hands after the job is complete.
- Know the emergency procedures.

# Facility-specific Information

- Let's discuss the following:
  - The chemicals we use in our facility and the hazards of these chemicals.
  - Proper handling procedures:
    - Methods to identify a spill or release
    - PPE
    - Equipment and procedures
    - Storage and disposal
  - Our emergency procedures.
  - The location of our hazard communication written program.
  - The location of our chemical inventory and SDSs.
- Questions?

# On-the-Job Training

- Your supervisor will provide on-the-job training and demonstrations for chemicals in your department. Training will cover:
  - PPE
  - Equipment handling procedures
  - Cleanup
  - Storage
  - Emergency situations
- You will be asked to demonstrate your understanding of proper chemical handling before being assigned to work without direct supervision.

# Summary

- Hazard communication ensures we know what chemicals we use, their hazards and how to safely handle them.
- You have received training that provides the information you need to handle chemicals safely.
- Remember, the hazardous chemical list and SDSs are available to you as needed.
- All chemicals must be labeled properly.
- Never bring in a new chemical without first having a thorough review of the SDS.



# For More Information

For more information regarding hazard communication or other safety issues, please contact:

TIG Advisors

[www.tigadvisors.com](http://www.tigadvisors.com)

573-875-4800