

PRESENTER'S GUIDE

"GHS CONTAINER LABELS IN CONSTRUCTION ENVIRONMENTS"

Part of the Construction Safety Kit Series

OUTLINE OF MAJOR PROGRAM POINTS

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The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- **The Hazard Communication Standard was created by the Occupational Safety and Health Administration (OSHA) in 1983.**
 - This "HAZCOM Standard" gives you the "right to know" about any hazardous substances in your workplace, and how to handle them safely.
- **One important source of this information is HAZMAT container labels.**
 - To ensure that the labels on HAZMAT containers communicate clearly, OSHA requires them to follow the rules that are set out in the "Globally Harmonized System" or "GHS".
- **In general, "hazard communication" helps people work more safely by informing them about any potential hazards they could encounter on the job.**
- **OSHA's Hazard Communication Standard focuses on the hazards that are associated with "hazardous materials" (HAZMATs).**
 - The HAZCOM Standard ensures that workers know about any HAZMATs on their job sites, and are provided with the information they need to work with the materials safely.
 - This information must be provided by the companies that supply the hazardous materials, as well as the companies whose employees handle them.

- **Under HAZCOM, information is communicated in three main ways:**
 - HAZMAT container labels.
 - The Safety Data Sheets that are provided for each substance.
 - The written Hazard Communication Program that each employer creates for their company.

- **Because the original Hazard Communication Standard was "performance based", it described what HAZMAT suppliers and employers needed to do, and let them decide how to do it.**
 - OSHA told HAZMAT suppliers what information should appear on container labels, and let the individual companies come up with their own systems for presenting that information.

- **As a result, a number of different labelling systems were developed for use on HAZMAT containers.**
 - An employee could have to remember how several labelling systems worked.
 - As a result, they could have trouble getting important information from a label that was unfamiliar to them, especially in an emergency.
 - That could be dangerous.

- **People who handle hazardous materials need to be able to get information about HAZMATs quickly and clearly in order to work with them safely, no matter where those people are or what language they speak.**

- **To make vital information available quickly and easily, OSHA needed a standard system for presenting that information on the container labels as well as on other documentation that is required under the HAZCOM Standard.**
 - They found what they needed in the Globally Harmonized System of Classification and Labelling of Chemicals, which was created by the United Nations.

- **The Globally Harmonized System, or "GHS", helps people anywhere in the world obtain accurate information about hazardous materials.**
 - The GHS was integrated into the HAZCOM Standard in 2012.
- **The GHS standardizes:**
 - How materials are classified.
 - How their hazards and safety precautions are described.
 - How this information is presented.
- **The GHS begins this process by dividing materials into "hazard classes" that are represented by nine "pictograms".**
 - These images help a container label to communicate hazard information at a glance.
- **GHS container labels use text elements to convey five types of information about a material, including its:**
 - Name.
 - Signal Word.
 - Hazard Statement.
 - Precautionary information.
 - The name and contact information of its supplier.
- **The Globally Harmonized System also recommends how these elements should be positioned on the label, so an employee will always know just where to look to find the information they want.**
- **Under the Hazard Communication Standard, GHS-compliant labels must be displayed on all HAZMAT containers except those that are used as "in-house" containers.**
 - In-house containers never leave the job site.
 - In-house container labels do not have to follow the GHS format, but they do have to display all of the information that is required by the system.

- **When it created the Globally Harmonized System, the United Nations faced a serious challenge, how to explain the types of hazards that are associated with different materials to people from diverse cultural backgrounds, who also speak different languages.**
 - The U.N.'s solution was simple.
 - They used pictures.
- **These images are called pictograms.**
 - They represent the hazards associated with a material inside a container.
- **There are nine pictograms in the Globally Harmonized System. They describe important information about:**
 - A material's physical properties.
 - Its health effects.
 - How it can affect the environment.
- **These pictograms are the main "visual" elements on a GHS container label and help communicate a material's hazards at a glance.**
- **An image of a person's upper body with a "star" inside it is the health hazard pictogram. It indicates that a chemical's hazards may include:**
 - The potential to cause cancer.
 - Reproductive, target organ or aspiration toxicity.
 - Respiratory sensitivity.
- **The "flame" pictogram indicates that the chemical is:**
 - Flammable or pyrophoric.
 - Self-heating or self-reactive.
 - A type of organic peroxide.
 - One that emits a flammable gas.
- **An exclamation point indicates that the chemical may:**
 - Be harmful to humans.
 - Be a sensitizer or irritant to the skin, eyes or respiratory tract.
 - Have narcotic effects.
 - Be hazardous to the ozone layer.

- **An image of a gas cylinder indicates that the chemical is a "gas under pressure".**
- **Test-tubes dripping a liquid on a bar of metal and a hand means that:**
 - The chemical can be corrosive to metals.
 - It can cause injuries to the skin and eyes.
- **An image of an "explosion" shows that the substance is:**
 - Explosive.
 - "Self-reactive".
 - Another type of organic peroxide.
- **A picture of a flame over a circle indicates that the chemical is an oxidizer, which can cause other materials to burn more intensely.**
- **The image of a dead tree and fish means that the chemical:**
 - Is hazardous to the environment.
 - Can harm living things in the water.
- **The "skull and crossbones" pictogram tells us that the chemical is "acutely toxic".**
 - Exposure to it can cause illness and even death.
- **Many dense pages of technical text could be written about any single hazardous material.**
 - But all of that data isn't very useful to someone who works with a HAZMAT and needs information about it quickly.
- **Which is why the Globally Harmonized System standardizes the classification and description of hazardous materials.**
 - It summarizes HAZMAT information so it can be communicated accurately and efficiently, even in an emergency.

- **GHS container labels use five text elements to describe a material's physical properties and hazards, as well as the precautions that should be taken when handling it.**
 - GHS does not require the text elements on container labels to appear in a specific format.
 - The system does recommend a certain order and position for them.
- **At the top of the label is the material's name as it appears on its Safety Data Sheet.**
 - GHS calls this information the "product/chemical identifier".
- **The next element is the chemical's "signal word", which indicates the relative severity of the chemical's hazards. The GHS system uses two standard signal words:**
 - "Warning" (hazardous).
 - "Danger" (very hazardous).
- **Another text element on a GHS label is the hazard statement.**
 - Based on a material's hazard class and category, hazard statements describe the nature and severity of its hazards.
 - There are many different hazard statements in the Globally Harmonized System, but they have been standardized as much as possible.
- **Commonly used GHS hazard statements include phrases such as:**
 - "May be harmful if swallowed".
 - "Causes severe skin burns and eye damage".
 - "Suspected of causing cancer".
- **The information that appears next on the label is the chemical's "precautionary statement", which is usually the largest block of text on a label.**

- **Standard GHS precautionary statements provide four types of information about a HAZMAT:**
 - How to prevent exposure.
 - How to respond in case of a spill.
 - How to store the material safely.
 - How to dispose of it properly.
- **Finally, the label includes the name, address and telephone number of the company that produced or distributed the chemical, known as the supplier identifier.**

*** * * SUMMARY * * ***

- **OSHA integrated the Globally Harmonized System into its HAZCOM Standard to help communicate important information about hazardous materials to the people who work with them.**
- **The GHS standardizes how materials are classified, how their hazards and safety precautions are described, and how this information is presented.**
- **GHS container labels use a combination of visual and text elements to make information about HAZMATs available quickly and easily.**
- **The main visual elements on a GHS container label are pictograms that illustrate the hazards associated with the material inside.**
- **The text elements on a GHS label provide information such as the material's name, its hazard class, safety precautions and the company that supplied it.**
- **Now that you understand how GHS container labels communicate important facts about hazardous materials, and what GHS pictograms stand for, you have the ability to get the information you need to handle HAZMATs safely... quickly and easily!**