

PRESENTER'S GUIDE

"GHS CONTAINER LABELING... 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.

- **To help protect employees from potentially hazardous chemicals, in 1983 OSHA created the Hazard Communication Standard.**
 - The purpose of the Standard was "... to ensure hazards of all chemicals produced or imported are evaluated, and details regarding their hazards transmitted to employers and employees".
- **Now, for the first time since it was implemented, the Hazard Communication Standard is undergoing some significant changes.**
 - OSHA is incorporating the "Globally Harmonized System of Classification and Labeling of Chemicals" (GHS for short) into the Standard.
- **The GHS was developed by the United Nations, with the help of hazard communication experts from many countries and organizations.**
 - Its aim is to help standardize the way chemical information is provided... anywhere in the world.
- **One of the major things that the GHS changes in the Hazard Communication Standard is how containers of potentially hazardous chemicals should be labeled.**
- **When OSHA originally created the Standard it was "performance based".**
 - This meant that while the Standard described what companies needed to accomplish, it left them free to decide exactly how they would do it.

- **For container labels OSHA told manufacturers and distributors of potentially hazardous chemicals what type of information should appear on their labels.**
 - But they left the question of how to convey that information up to the individual companies.
- **As a result, a number of different types of labeling systems were created, the most common being...**
 - The National Fire Protection Association (NFPA) System.
 - The Hazardous Materials Information System (HMIS).
- **There have even been differences in the descriptions and symbols that government agencies such as the Department of Transportation and OSHA have used in their labeling and placarding systems.**
- **What the GHS does is to specify exactly how this information should be depicted and presented on labels and placards.**
- **As part of this effort to make the information that appears on labels more specific, the GHS establishes both "Hazard Classes" and "Hazard Categories".**
 - Many of the Hazard Classes are further divided into Categories, which often reflect the relative severity of the hazard.
 - Much of this information ends up appearing on container labels.
- **In addition to standardizing information and symbols, there was another challenge to creating the GHS labeling system.**
 - The labels had to convey information to workers around the world who use many different languages.
 - As a result, GHS labels use a combination of pictograms and text to convey information.

- **There are six major pieces of information on a GHS label.**
 - A product/chemical identifier.
 - A supplier identifier.
 - Hazard pictograms.
 - A "Signal Word".
 - Hazard Statements.
 - Precautionary information.
- **Some of these are "text" elements and some are "visual". Let's look at each one in more detail.**
- **While GHS labels do not have to use a specific text format, the GHS does have a recommended order and positioning of the text elements on the label.**
- **The "Product/Chemical Identifier" appears at the top of GHS label.**
 - It's simply the name of the chemical as it appears on the Safety Data Sheet (and most likely as it has appeared on the product's SDS).
- **The next element on the label is the chemical's "Signal Word".**
 - There are two standard "Signal Words" that are used in the GHS system, "Warning" and "Danger", depending on the severity of a chemical's hazards.
- **Appearing next on a GHS label is the "Hazard Statement".**
 - The GHS includes a set of standardized Hazard Statements.
 - These are used based on a chemical's Class and Category.
 - They can be found in the GHS "Purple Book".
- **The next element on the label is the chemical's "Precautionary Statement".**
 - This is typically the bulk of the text on the label.

- **There are four types of information in a Precautionary Statement, dealing with:**
 - Exposure prevention.
 - How to respond in case of spill or exposure.
 - Safe storage practices.
 - How to dispose of the chemical.

- **The last element of text on a GHS label is the "Supplier Identifier".**
 - This is the name, address and telephone number (including the Country Code) of the producer or distributor of the chemical.

- **The only "visual" elements on a GHS label are the pictograms that apply to that class and category of chemical.**
 - Like the "Hazard Statements", the pictograms reflect any health, physical and environmental hazard information that is applicable to the chemical, based on its GHS Hazard Class and Category.

- **There are nine standard pictograms that are used in the GHS. The first is a "health hazard" pictogram (the image of a person's upper body with a "star" inside it) that indicates the chemical's hazards may be:**
 - Carcinogenicity.
 - Mutagenicity.
 - Reproductive toxicity.
 - Respiratory sensitivity.
 - Target organ toxicity.
 - Aspiration toxicity.

- **A flame indicates that the chemical may be:**
 - Flammable.
 - Pyrophoric.
 - Self-heating.
 - Emits flammable gas.
 - Self-reactive.
 - An organic peroxide.

- **An exclamation point indicates that the chemical may...**
 - Be a skin or eye irritant.
 - Be a skin sensitizer.
 - Acutely toxic...
 - Have narcotic effects.
 - Be a respiratory tract irritant.
 - Be hazardous to the ozone layer.

- **A picture of a gas cylinder indicates that the chemical is a "gas under pressure".**

- **The image of test-tubes dripping a liquid on a bar of metal and a hand indicate that the chemical can...**
 - Cause skin corrosion or burns.
 - Cause eye damage.
 - Be corrosive to metals.

- **An image of an explosion tells workers that the substance is either:**
 - Explosive.
 - A "self-reactive".
 - Or an organic peroxide.

- **A picture of a flame over a circle indicates that the chemical is an oxidizer.**

- **Images of a tree and fish indicate that the chemical is an environmental hazard and has "aquatic toxicity".**

- **And the image of a skull and crossbones tells workers that the chemical is "acutely toxic" and that exposure can be toxic or even fatal.**

- **There is one important exception to having to use GHS labels.**
 - Companies can still use other labeling systems to label "in-house" containers.
 - But these "alternative workplace labels" must contain all the information that is required by the GHS system.

- **Like the Hazard Communication Standard, the Globally Harmonized System stresses the importance of training employees regarding a number of things, including how to read and interpret container labels.**
- **Employees must also be given additional training:**
 - When a new chemical is introduced to their work area.
 - If they change jobs and could be exposed to chemicals that they have not previously worked with.
- **Additionally, all employees must undergo periodic "refresher" training to keep their knowledge current.**
 - This will be especially important under the Globally Harmonized System since the United Nations has said that they will revise the GHS every two years.
 - As a result OSHA anticipates that the Hazard Communication Standard may also be updated periodically.
- **It may seem that incorporating the Globally Harmonized System into a company's Hazard Communication Program doesn't involve a lot of new or different things.**
 - However, it will require a good deal of work on everyone's part with regard to container labeling.
- **Chemical manufacturers and distributors will need to start using container labels that conform to the GHS requirements, including the new pictograms.**
 - Companies will need to train their employees regarding the use of GHS labels.
- **Realizing that these things cannot be done overnight, OSHA has given companies a good deal of time to begin using the Globally Harmonized System.**
 - The agency has established a series of "phase-in" dates involving container labeling.
- **Because some manufacturers will begin using GHS labels fairly quickly, OSHA is requiring that all employees are trained regarding these materials by December 1, 2013.**

- **By June 1, 2015, companies must be in compliance with all of the provisions that the GHS adds to the HAZCOM Standard.**
 - Except that chemical distributors can continue ship containers of chemicals labeled with "old" types of warning labels until December 1st of that year.
- **By June 1, 2016 users of potentially hazardous chemicals must have updated any "alternative workplace labeling" that they are using, as well as incorporated information about GHS labeling into their written Hazard Communication Programs.**
 - They must also provide employees with any additional training about chemicals that have newly identified physical or health hazards based on GHS criteria.
- **During these phase-in times, companies are permitted to use either their current approaches to complying with the HAZCOM Standard or the new, GHS approaches.**

*** * * SUMMARY * * ***

- **The Globally Harmonized System standardizes the labeling of chemicals worldwide.**
- **GHS labels contain very specific information about the chemicals they represent.**
- **There are six major elements on a GHS label, beginning with the "Product Identifier".**
- **The GHS label's "Signal Word" tells you how severe chemical's hazards are.**
- **All GHS labels have "Hazard Statements" and "Precautionary Statements"**

- **There are nine standard pictograms that are used in the GHS labeling system. They reflect any health, physical and environmental hazards a chemical may have.**
- **GHS labels make it easier to determine what hazards a chemical may have, and how you can protect yourself from them. Learning how to recognize and read them will help to keep you safe!**