RISK BULLETIN

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HAZARD COMMUNICATION AND THE GLOBALLY HARMONIZING SYSTEM

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The OSHA Hazard Communication Standard is now aligned with the Globally Harmonizing System (GHS). GHS is a key change in the OSHA Hazard Communication requirements in that it affects both the Suppliers & Manufacturers of hazardous chemicals and the Employers whose employees may be exposed to those chemicals.

GHS is an international approach that standardizes chemical hazard classification, labeling and safety data sheets. For more information visit OSHA's GHS website at www.osha.gov/dsg/hazcom/ghs.html

WRITTEN HAZARD COMMUNICATION PROGRAM

An effective hazard communication program ensures that workers who may be exposed to hazardous chemicals know about the chemical's hazards and understand how to protect themselves from those hazards. Product labels and safety data sheets (SDS), formerly known as material safety data sheets (MSDS), are the main tools for developing a hazard communication program. They identify the hazardous properties of chemicals that may pose a health or physical hazard and provide guidance for appropriate protective measures.

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The first requirement of the Hazard Communication standard (Worker Right to Know Law) is that employers should establish a written, comprehensive Hazard Communication program which includes provisions for container labeling, Safety Data Sheets and employee training. The program should also state the means that employers will use to inform employees of hazards associated with non-routine tasks and the way the employer will inform contractors in manufacturing facilities of the hazards to which their employees may be exposed. In addition, the program should spell out general emergency response procedures. Specific spill and leak procedures will have to be developed for each family or individual chemical. For the most part, this will be found on the Safety Data Sheets. The written program need not be lengthy or complicated, but it should be available to employees, their designated representatives and to the Occupational Safety and Health Administration.

CHEMICAL HAZARD ASSESSMENT

An employer's Hazard Communication Program depends on an adequately performed chemical hazard assessment. An inventory of all chemicals used/produced should be conducted. The type and degree of hazard they present should be evaluated. Chemical manufacturers and importers are required to review the available scientific evidence concerning the hazards of the chemicals they produce or import and should provide this information to employers in the form of a Safety Data Sheet. Employers then should use this information to evaluate the hazards presented to their workers.

UNDERSTANDING THE LABELLING CHEMICALS REQUIREMENTS IN THE WORKPLACE

Approximately 25% of the nation's work force is exposed to significant quantities of one or more chemicals. There are over half a million different chemical products in the industrial workplace. Health effects of chemical exposure can range from rashes to pulmonary disease and cancer. Some chemicals also present physical hazards (flammable, corrosive, or explosive), they require careful handling to prevent harmful reactions.

Suppliers should now provide new product labels that include signal words, pictograms, hazard statements, and precautionary statements for chemicals based on their hazard classification and category. Employers should ensure that employees understand the meaning of each of these elements on the new labels.

HCS Pictograms and Hazards

Health Hazard  ■ Carcinogen ■ Mutagenicity ■ Reproductive Toxicity ■ Respiratory Sensitizer ■ Target Organ Toxicity ■ Aspiration Toxicity	**Flame**  ■ Flammables ■ Pyrophorics ■ Self-Heating ■ Emits Flammable Gas ■ Self-Reactives ■ Organic Peroxides	**Exclamation Mark**  ■ Irritant (skin and eye) ■ Skin Sensitizer ■ Acute Toxicity ■ Narcotic Effects ■ Respiratory Tract Irritant ■ Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  ■ Gases Under Pressure	**Corrosion**  ■ Skin Corrosion/Burns ■ Eye Damage ■ Corrosive to Metals	**Exploding Bomb**  ■ Explosives ■ Self-Reactives ■ Organic Peroxides
Flame Over Circle  ■ Oxidizers	**Environment** (Non-Mandatory)  ■ Aquatic Toxicity	**Skull and Crossbones**  ■ Acute Toxicity (fatal or toxic)

For more information:

OSHA® Occupational Safety and Health Administration
U.S. Department of Labor
www.osha.gov (800) 321-OSHA (6742)

OSHA 3491-02 2012

LABELS AND OTHER FORMS OF WARNING

Chemical manufacturers and importers, as well as their distributors, should be sure that containers of hazardous chemicals leaving their plants are labeled or marked with the identity, appropriate hazard warnings, target organs, first aide, and the name and address of the manufacturer or other responsible party. In the workplace, materials which are removed from their original shipping containers should be labeled with the same information that appears on the shipping label. The hazard warnings can be any type of message, words, pictograms or symbols which convey the Hazards of the chemicals in the container. Labels should be legible, in English (and other languages if necessary or desired) and prominently displayed. Many pre-made labels are available which can be filled in by the employer for individual materials. The message should be worded such that the worker can understand its meaning.

Some exceptions to the labeling rule include:

- Stationary signs or placards which convey the hazard information for a number of stationary containers may be posted in a work area rather than labeling each of the containers as long as the coding on the actual containers is clearly understood.
- Standard operating procedure tickets or sheets may be used to convey the information in place of labels on stationary process equipment if they contain the same information and are readily available to employees in the work area.
- Employers are not required to label containers into which hazardous materials are transferred from labeled containers, and which are intended only for the immediate use of the employee who makes the transfer.
- The Federal OSHA standard definition of containers excludes pipes and piping systems.
- Check your local state regulations for size, color and content of state specific labels.

SAFETY DATA SHEETS

Employers are responsible for obtaining and, if necessary, developing Safety Data Sheets for each hazardous material used in their workplaces. Each SDS should be in English and include information regarding the specific identity of the hazardous material involved and the common name. Beyond identity, the employer should provide information on the nine universal pictograms, physical and chemical characteristics of the hazardous chemicals including: known acute and chronic health effects; related health information including any target organ information; exposure limits and whether the chemical is considered to be a carcinogen. Finally, emergency, first aid procedures and the identification of the organization responsible for preparing the sheet should be on the Safety Data Sheet. Copies of the SDSs should be readily accessible to employees in the work area. A separate file or master list may be kept in a company's main office.

EMPLOYEE INFORMATION AND TRAINING

In order to help employees make the best use of Safety Data Sheets, employers should establish a training and information program. Employees should be trained at the time of their initial assignment to an area where a hazardous material is in use and whenever a new material is introduced to their work area. The minimum training topics should include the following:

- The existence of the Hazard Communication standard and the requirements of the standard.
- The components of the employer's Hazard Communication program.
- Operations in the work area where hazardous chemicals are present.
- Location of the written hazard evaluation procedures, communications program and lists of hazardous materials.

They should also be told where they can find the Safety Data Sheets.

The employee training should also include:

- How the company implemented the Hazard Communication program.
- How to find, read and interpret information on the labels and Safety Data Sheets and how employees can obtain and use the available hazard information.
- What the hazards of the chemicals in the employee's work area are.
- How to identify the hazardous material in the workplace (such as appearance, smell or other methods to detect the material).
- What measures employees can take to protect themselves from the hazards including those you have implemented such as appropriate work practices, emergency procedures and required Personal Protective Equipment.
- What specific procedures the employer has implemented to provide protection from the hazardous materials (this might include work practices, personal protective equipment or specific ventilation requirements).
- An explanation of the labels on shipped containers you receive, labelling system you use on in-house containers in the employees' work areas containing hazardous chemicals.

HAZARD INFORMATION AVAILABILITY TO EMPLOYERS

Safety Data Sheets should be available for all the hazardous materials used. If there are "trade secrets" associated with a particular product, the Hazard Communication standard strikes a balance between the need to protect the exposed employees and the chemical manufacturer's need to maintain confidentiality of a bona fide trade secret.

The same rule applies to employers who are using a particular material which is a "trade secret" regarding their process. The manufacturer or employer may still be required to disclose the material and its properties to health professionals who are furnishing medical or other occupational health services under specified conditions of confidentiality.

Missing or Safety Data Sheets in need of update can be obtained by writing to the chemical manufacturer or the distributor. SDS request letters to chemical manufacturers, importers or distributors should say something similar to the following:

"As you are aware, OSHA requires employers to provide training to their employees regarding the hazards of chemicals or other hazardous materials. To properly train all employees we need a Safety Data Sheet (SDS) for one of your products, (name of product).

Your prompt attention is necessary to maintain a proper level of safety for our employees. Please send the SDS within 30 days.

Sincerely"

It is good practice to order the SDS on every purchase of a hazardous material.

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