SAFETY TIPS

Hazard Communication – Safety Data Sheets (SDS)

There are very few industries or jobs where the worker is not exposed to or working around some type of hazardous material or chemical. A hazardous chemical, as defined by OSHA under the Hazard Communication Standard (HCS), is any chemical which can cause a physical or a health hazard. This determination is made by the chemical manufacturer, as described in 29 CFR 1910.1200(d).

The OSHA Hazard Communication Standard (HCS) is designed to protect workers against chemical source illnesses and injuries by ensuring that employers and employees are provided with sufficient information to recognize chemical hazards and take appropriate protective measures. The HCS requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDS) (Formerly known as Material Data Sheets MSDS) to communicate the hazards of all hazardous chemical products. OSHA also requires all employers to perform a Hazard Safety Assessment (HSA) for all work and work tasks in their workplace. The SDS is the hazard assessment that has been conducted by the chemical manufacturer and it is an extremely valuable and useful resource for all workers. It is important that all workers have a basic understanding of the SDS format, information that is contained in the SDS, and how to utilize the information to ensure that everyone is properly protected in the workplace.

Under the current Globally Harmonized System (GHS) the Safety Data Sheet formats are now uniform and are easy to use in finding important safety information pertaining to the specific chemicals in your workplace. Employers must maintain all SDS for all hazardous materials present in their workplace, ensure employees have access to Safety Data Sheets in their work area throughout the workday, and train all employees on the hazardous chemicals in their work area before the employee's initial assignment or when new chemicals are introduced. Even if chemicals are purchased in small quantities at a home improvement or parts store, an SDS must be obtained, maintained in the workplace, with employee review and training completed. SDS's can be kept electronically as long as the employee can obtain access in the event the power goes out or internet is lost.

The following is a basic guideline and description of the 16 sections of the standard SDS format:

Section 1, Identification includes product identifier used on the label and other means of identification, manufacturer or distributor name, address, phone number, emergency phone number, recommended use of the chemical, and restrictions on use. Make sure that the identifier labels on secondary containers and other containers can be cross-referenced to the SDS inventory list to ensure that the SDS can be located in reasonable time in an emergency.

Section 2, Hazard(s) identification includes all hazards regarding the chemical; required label elements. This would include any signal words, hazard statements, symbols, and precautionary statements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims. Will include chemical name- common name and synonyms, CAS number and other unique identifiers, impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance.

Section 4, First-aid measures Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin or eye contact, and ingestion. Includes important symptoms/effects, acute, delayed; required treatment.
Indication of immediate medical attention and special treatment needed, if necessary. It is a good idea to have this available if any worker seeks medical treatment as it can provide important information to the treating medical personnel.

Section 5, Fire-fighting measures lists suitable (and unsuitable) extinguishing media and techniques, equipment; chemical hazards from fire. Special protective equipment and precautions for fire fighters.

Section 6, Accidental release measures lists emergency procedures; protective equipment, proper methods of containment and cleanup.

Section 7, Handling and storage lists precautions for safe handling and conditions for safe storage, including incompatibilities. This section is especially important to employees who oversee the storage or warehousing of chemicals and other materials.

Section 8, Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); ACGIH Threshold Limit Values (TLVs); and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the SDS where available as well as appropriate engineering controls; Individual protection measures, such as personal protective equipment (PPE). This section is very important for employees to read and understand because it provides information as to the hazards and how the employee can control them including what PPE is required. This section will typically provide specific type of PPE that should be used.

Section 9, Physical and chemical properties lists the chemical's characteristics, i.e. Appearance (physical state, color, etc.). Odor, odor threshold, PH, flash point, flammability (solid, gas), melting point, freezing point, and more.

Section 10, Stability and reactivity lists chemical stability and possibility of hazardous reactions. Lists possibility of chemical reactions, conditions to avoid (e.g. static discharge, shock, and vibration), incompatible materials, hazardous decomposition products.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information Ecotoxicity (aquatic and terrestrial), persistence and degradability, mobility in soil.

Section 13, Disposal considerations Description of waste residues and information on their safe handling and methods of disposal.

Section 14, Transport information Transport hazard class, packing group, environmental hazards, and special precautions in connection with transport or conveyance within or outside the premises.

Section 15, Regulatory information Safety, health, and environmental regulations specific for the product.

Section 16, Other information includes the date of preparation of SDS or last revision.

It is important to know and understand that product labels and Safety Data Sheets (SDS) can provide employees and workers with information on the hazards of chemicals in your workplace. While this sheet offers a guide to understanding the standard SDS format and where to find specific chemical information, employees need to also review, be familiar with, and understand the specific SDS for each hazardous chemical in their workplace. They need to know where the SDS's are located in their workplace and understand the hazards of each chemical and what measures that need to be taken to protect the worker. If you have any questions or unsure as to where the SDS's are located, or need to review any SDS, please notify your supervisor at your earliest opportunity.