Definitions for SDS

Action levels - levels of exposure (concentration in air) at which OSHA regulations for protective programs must be put into effect.

Acute toxicity - ability of a substance to cause poisonous effects resulting in severe biological harm or death soon after a single exposure or dose.

Ambient - encompassing atmosphere.

American Conference of Governmental Industrial Hygienists (ACGIH) - professional organization devoted to worker health protection and develops threshold limit values for chemical substances.

American National Standards Institute (ANSI) - body of various trade, technical, professional, and consumer groups whom develop voluntary ANSI standards.

American Society for Testing and Materials (ASTM) - voluntary membership organization with members from a broad spectrum of individuals and agencies that sample and test methods on materials to determine the health and safety aspects of materials, safe performance guidelines, and effects of physical and biological agents and chemicals.

Article - manufactured item other than fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical and does not pose a physical hazard or health risk to workers.

Carcinogen - a chemical is considered to be a carcinogen if:

- it has been evaluated by the International Agency for Research on Cancer (IARC), and found to be a carcinogen or potential carcinogen,
- it is listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition),
- it is regulated by OSHA as a carcinogen.

CAS Number - identification number assigned by the Chemical Abstracts Service (CAS) of the American Chemical Society.

Chemical - any element, chemical compound or mixture of elements and/or compounds.

Chemical Transport Emergency Center (CHEMTREC) - a national center established by the Chemical Manufacturers Association (CMA) to relay pertinent emergency information concerning specific chemicals on request; 1-800-424-9300.

Closed Cup (cc) - method used in flash point testing.

Chronic toxicity - capacity of a substance to cause long-term poisonous human health effect.

Code of Federal Regulations (CFR) - collection of rules and regulations originally published in the Federal Register by various governmental departments and agencies.

Combustible liquid - any liquid having a flashpoint at or above 100° F (37.8° C), but below 200°F (93.3° C), except any mixture having components with flashpoints of 200° F or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

Common name - any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

Container - any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Corrosive - causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a chemical is considered to be corrosive if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in appendix A to 49 CFR part 173, it destroys or changes irreversibly the structure of the tissue at the site of contact following an exposure period of four hours. This term shall not refer to action on inanimate surfaces.

DOT – federal Department of Transportation

Employer - a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

Explosive - a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

Extremely hazardous substances - 406 chemicals identified by EPA on the basis of toxicity and listed under SARA Title III.

FFDCA - Federal Food, Drug, and Cosmetic Act.

Flammable - a chemical that falls into one of the following categories:

- aerosol, flammable - an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening.
- gas, flammable - (A) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of 13% by volume or less; or (B) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than 12% by volume, regardless of the lower limit.
- liquid, flammable - any liquid having a flashpoint below 100° F (37.8°. C), except any mixture having components with flashpoints of 100° F (37.8° C) or higher, the total of which make up 99% or more of the total volume of the mixture.
- solid, flammable - a solid, other than a blasting agent or explosive as defined in 1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or

processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create aserious hazard. A chemical shall be considered to be a flammable solid if, when tested by the method described in 16CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

Flashpoint - the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when testedas follows:

- Tagliabue Closed Tester (See American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)) for liquids with a viscosity of less than 45 Saybolt Universal Seconds (SUS) at 100° F(37.8° C), that do not contain suspended solids and do not have a tendency to form a surface film under test,
- Pensky-Martens Closed Tester (see American National Standard Method of Test for Flash Point by Pensky-MartensClosed Tester, Z11.7-1979 (ASTM D 93-79)) for liquids with a viscosity equal to or greater than 45 SUS at 100° F (37.8°C), or that contain suspended solids, or that have a tendency to form a surface film under test,
- Setaflash Closed Tester (see American National Standard Method of Test for Flash Point by Setaflash Closed Tester(ASTM D 3278-78)).

Organic peroxides, which undergo autoaccelerating thermal decomposition, are excluded from any of the flashpoint determination methods specified above.

Hazardous chemical - any chemical that is a physical hazard or a health hazard.

HCS - Hazard Communication Standard found in 29 CFR 1910.1200.

Health hazard - a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed workers. Theterm "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants,corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, andagents which damage the lungs, skin, eyes, or mucous membranes.

Highly toxic - chemical falling within any of the following categories:

- chemical that has a median lethal dose (LD_{50}) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each,
- chemical that has a median lethal dose (LD_{50}) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each,
- chemical that has a median lethal concentration (LC_{50}) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for onehour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

IDLH (Immediately dangerous to life and health) - maximum level to which a healthy individual can be exposed to a chemicalfor 30 minutes and escape without suffering irreversible health effects or impairing symptoms.

Irritant - chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A chemical is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of 16 CFR 1500.41 for four hours exposure or by other appropriate techniques, it results in an empirical score of five ormore. A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriatetechniques.

Label - any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

Lethal concentration (LC_{50}) - concentration in air of a toxic substance required to cause the death of half the test animal population under controlled administration.

Lethal dose 50 (LD_{50}) - dose or amount of toxic substance required to cause death in half the test animal population under controlled administration.

Safety data sheet (SDS) - written or printed material concerning a hazardous chemical which is prepared inaccordance with paragraph (g) of this section.

Mixture - any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

National Institute for Occupational Safety and Health (NIOSH) – federal agency involved in research on health effects due to workplace exposures and is responsible for testing and certifying respirators.

Organic peroxide - an organic compound that contains the bivalent -O-O-structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

Oxidizer - chemical other than a blasting agent or explosive as defined in 1910.109(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.*Permissible Exposure Limit (PEL)* - maximum air contaminant concentration a worker can be exposed to on a repeated basiswithout developing adverse effects.

Physical hazard - chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

ppb - parts per billion.

ppm - parts per million.

Pyrophoric - chemical that will ignite spontaneously in air at a temperature of 130 deg. F (54.4 deg. C) or below.

Sensitizer - causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissueafter repeated exposure to the chemical.

Specific chemical identity - chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

Threshold limit value (TLV) - air concentrations of chemical substances to which it is believed that workers may be exposed daily without adverse effects.

Threshold limit value (TLV) - ceiling limit - ceiling exposure limit or concentration that should not be exceeded even instantaneously.

Toxic - a chemical falling within any of the following categories:

- chemical that has a median lethal dose LD_{50} of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each,
- chemical that has a median lethal dose LD_{50} of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each,
- chemical that has a median lethal concentration LC_{50} in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than two milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

Trade secret - any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

TSCA - Toxic Substances Control Act.

Unstable (reactive) - chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.

Water-reactive - chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

Work area - room or defined space in a workplace where hazardous chemicals are produced or used, and where workers are present.

Workplace - establishment, job site, or project, at one geographical location containing one or more work areas.