

# MSDS DEFINITIONS

**ACGIH TLV:** American Conference of Government Industrial Hygienists threshold limit value - Refers to airborne concentrations of substances and represents conditions under which it is believed that nearly all workers may be repeatedly exposed, day after day, without adverse health effects.

**CARCINOGEN:** A material that either causes cancer in humans, or, because it causes cancer in animals, is considered capable of causing cancer in humans.

**CAS Registration Number, CAS, CAS RN:** An assigned number used to identify a chemical. CAS stands for Chemical Abstracts Service, an organization that indexes information published in Chemical Abstracts by the American Chemical Society and that provides index guides by which information about a particular substance may be located in the abstracts. Sequentially assigned by CAS numbers identify specific chemicals, except when followed by an asterisk (\*) which signifies a compound (often naturally occurring) of variable composition. The numbers have no chemical significance. The CAS number is a concise, unique means of material identification.

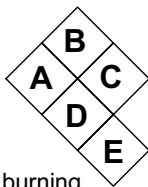
**CFC:** Chlorofluorocarbon. Associated with damage to the earth's ozone layer.

**CHEMTREC:** Chemical Transportation Emergency Center. Established in Washington, DC, by the Chemical Manufacturers Association (CMA) to provide emergency information on materials involved in transportation accidents. Twenty-four-hour number 1-800-424-9300.

**FIRE DIAMOND (NFPA Hazard Rating):** Per "NFPA 704" publication. Visual system that provides a general idea of the inherent hazards, and their severity, of materials relating to fire prevention, exposure and control. Preferred reading order: Health, Flammability, Reactivity, Special.

**Position A - Health Hazard (Blue).** Degree of hazard; level of short-term protection.

- 0= Ordinary Combustible Hazards in a fire
- 1= Slightly Hazardous
- 2= Hazardous
- 3= Extreme Danger
- 4= Deadly



**Position B - Flammability (Red)** Susceptibility to burning.

- 0= Will Not Burn
- 1= Will Ignite if Preheated
- 2= Will Ignite if Moderately Heated
- 3= Will Ignite at Most Ambient Conditions
- 4= Burns Readily at Ambient Conditions

**Position C - Reactivity, Instability (yellow).** Energy released if burned, decomposed, or mixed.

- 0= Stable and Not Reactive with Water
- 1= Unstable if Heated
- 2= Violent Chemical Change
- 3= Shock and Heat May Detonate
- 4= May Detonate

**Position D - Special Hazard (White)**

**Position E -** If two specific hazards exist.

- OXY = Oxidizer
- ACID = Acid
- ALKALI = Alkali
- COR = Corrosive
- W = Use No Water, reacts!
- ☠ = Radiation Hazard

**Flammable:** A chemical that includes one of the following categories:

**a) "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 the valve opening

**b) "Gas, Flammable."** (1) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of 13 percent by volume or less; or (2) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than 12 percent by volume, regardless of the lower limit.

**c) "Liquid, flammable."** Any liquid having a flash point 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 percent or more of the total volume of the mixture.

**d) "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 retaining heat from manufacturing processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A substance is a flammable solid if, when tested by the method described in 16 CFR 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, FP:** The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested by the following methods:

**a)** Tagliabue Closed Tester (see American National Standard Method of Test for Flash Point by Closed Tag Tester, Z11.24-1979 [ASTM D 56-79]).

**b)** Pensky-Martens Closed Tester (see American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7-1979 [ASTM D 93-79]).

**c)** Setaflash Closed Tester (see American National Standard Method of Test for Flash Point by Setaflash Closed Tester [ASTM D 3278-78]).

**Highly Toxic:** A chemical in any of the following categories:

**a)** A chemical with a median lethal dose (LD50) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

**b)** A chemical with a median lethal dose (LD50) 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 rabbit weighing between 2 and 3 kilograms each.

**c)** A chemical with a median lethal concentration (LC50) 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 one hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.

**HMIS RATING:** Hazardous Material Identification System - Rating system developed by the National Paint and Coatings Association to provide employees with a quick identification of the hazards associated with workplace materials.

**IARC:** International Agency for Research on Cancer.

**LC:** Lethal concentration is the concentration of a substance being tested that will kill.



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