

Hazard Communication – Common MSDS Terminology

Acute Effect	An adverse effect with severe symptoms occurring very quickly, as a result of a single excessive overexposure to a substance.
Acute Toxicity	The adverse effects resulting from a single excessive overexposure to a substance. Usually a figure denoting relative toxicity.
Asphyxiant	A vapor or gas that can cause unconsciousness or death by suffocation, most are associated with a lack of sufficient oxygen to promote life.
Boiling Point	A temperature at which a liquid turns to a vapor state. This term is usually associated with the temperature at sea level pressure when a flammable liquid gives off sufficient vapors to promote combustion.
Ceiling or 'C'	In terms of exposure concentrations, this is the number that should never be exceeded, even for a short period, for a substance.
Carcinogen	A substance or agent capable of producing cancer in mammals.
Cubic Centimeter (cc)	A volume measurement usually associated with small quantities of a liquid. One quart has 946 cubic centimeters.
Chronic Effect	An adverse effect with symptoms that develop or reoccur very slowly, or over long periods of time.
Chronic Toxicity	The adverse effects resulting from prolonged or repeat exposures to a substance, usually used as an indicator or relative toxicity for exposures over great lengths of time.
Combustible	A term used to classify liquids, gases, or solids that will burn readily. This term is often associated with 'flash point', which is a temperature at which a given material will generate sufficient vapors to promote combustion.
Concentration	A figure used to define relative quantity of a particular material, such as a mixture in air of 5 ppm Acetone in air.
Corrosive	A material with the characteristic of causing irreversible harm to human skin, or steel by contact. Many acids are classified as corrosives.
Decomposition	The breakdown of materials or substances into other substances or parts of compounds. Usually associated with heat or chemical reactions.
Dermal	Used on or applied to the skin.
Dermal Toxicity	The adverse effects resulting from exposure of a material to the skin. Usually associated with lab animal tests.
Evaporation Rate	The rate at which a liquid material is known to evaporate, usually associated with flammable materials. The faster a material will evaporate, the sooner it will become concentrated in the air, creating either an explosive/combustible mixture or toxic concentration, or both.
Flash Point	The temperature at which a liquid will generate sufficient vapors to promote combustion. Generally, the lower the flash point, the greater the danger of combustion.
Flammable	Any liquid that has a flash point of 100 degrees F or below. Also, any solid which can sustain fire and ignite readily.
General Exhaust	A term used to define a system for exhausting or ventilating air from a general work area, not as site specific as localized exhaust.
Gram (g)	A unit of weight. One ounce equals about 28.4 grams.
Hazardous Chemical	Any chemical which is either a physical or health hazard or both.

Ignitable	A term used to define any liquid, gas or solid which has the ability to be 'ignited' which means having a flash point of 140 degrees F or less.
Incompatible	Materials which could cause dangerous reactions from direct contact with one another.
Ingestion	Taking in of a substance through the mouth.
Inhalation	The breathing in of a substance in the form of a gas, liquid, vapor, dust, mist or fume.
Inhibitor	A chemical added to another substance to prevent an unwanted change from occurring.
Irritant	A chemical which causes a reversible inflammatory effect on the site of contact, however is not considered a corrosive. Normally, irritants affect the eyes, nose, mouth, and respiratory system.
Lethal Concentration (LC)	In lab animal tests, this is the concentration of a substance which is sufficient to kill the tested animal.
Lethal Concentration 50 (LC50)	In lab animal tests, this is the concentration of a substance required to kill 50% of the group of animals tested.
Lethal Dose (LD50)	The concentration of a substance required to kill the lab animal used for the test with a specific material.
Lower Explosive Limit (L.E.L.)	The lowest concentration, or percentage in air, of a vapor or gas, that will produce a flash fire when an ignition source is introduced.
Local Exhaust	The system for ventilating or exhausting air from a specific area such as in welding operations. More localized than general exhaust.
Melting Point	The temperature at which a solid changes to a liquid.
Milligram (mg)	A unit of measurement of weight. There are 1000 mg's in one gram of a substance.
Milligrams Per Cubic Meter Mg/m³	A unit of measurement usually associated with concentrations of dust, gases or mists in air.
Million Particles Per Cubic Meter (mppcf)	A unit of measure usually used to describe airborne particles of a substance suspended in air.
Mutagen	A substance or agent capable of altering the genetic material in a living cell, normally associated with carcinogens.
National Fire Protection Association (NFPA)	An organization which promotes fire protection/prevention and establishes safeguards against loss of property and/or life by fire. The NFPA has established a series of codes identifying hazardous materials by symbol and number for fire fighting purposes. These codes also classify materials in their order of flammability. With '0' being not burnable up to '4' which means will burn spontaneously at room temperature.
Olfactory	Relating to the sense of smell.
Oral	Used in or taken through the mouth into the body.
Oral Toxicity	A term used to denote the degree at which a substance will cause adverse health effects when taken through the mouth, normally associated with lab animal tests.
Oxidizer	A substance which yields oxygen readily to stimulate the combustion of an organic material.
Oxidizing Agent	A chemical or substance which brings on oxidation reactions by providing the oxygen to promote oxidation.
Permissible Exposure Limit (PEL)	An exposure concentration established by the Occupational Safety & Health Community which indicated the maximum concentration for which no adverse effects will follow.

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Parts Per Million (PPM) A unit of measurement for the concentration of a gas or vapor in air, usually expressed as number of parts per million parts of air.

Parts Per Billion (PPB) As above, only expressed as number of parts per billion parts of air.

Reactivity The term which describes the tendency of a substance to undergo a chemical change with the release of energy, often as heat.

Reducing Agent In an oxidation reaction, this is the material that combines with oxygen.

Respiratory System The breathing system, including the lungs, and air passages, plus their associated nervous and circulatory components.

Sensitizer A substance which, on first exposure, causes little or no reaction, however, with repeated exposure will induce a marked response not necessarily limited to the exposure site, usually associated with skin sensitization.

Specific Gravity The weight of a material compared to the weight of an equal volume of water, usually expresses a materials heaviness. A material with a specific gravity of greater than 1.0 will sink to the bottom of water, whereas a material with a specific gravity of less than 1.0 will float on top of water.

Short Term Exposure Limit (STEL) The maximum allowable concentration of a substance that one can be exposed to for less than 15 minutes and not produce adverse health effects.

Teratogen A substance or agent, usually associated with cancer, that when exposed to a pregnant female will cause malformation of the fetus. Usually associated with lab animal tests.

Threshold Limit Value (TLV) A term used by the Occupational Safety & Health Community to describe the airborne concentration of a material to which nearly all persons can be exposed to day in and day out, and not develop adverse health effects.

Toxicity The sum of adverse effects of exposure to materials, generally by mouth, skin, or respiratory tract.

Time Weighted Average (TWA) The airborne concentration of a material to which a person can be exposed over an average 8 hour work day.

Upper Explosive Limit (UEL) The highest concentration of a gas or vapor in air that will sustain or support combustion when an ignition source is present.

Vapor Density A term used to define the weight of a vapor or gas as compared to the weight of an equal volume of air. Materials lighter than air have a vapor density of less than 1.0, whereas materials heavier than air have a vapor density greater than 1.0.

Vapor Pressure A number used to describe the pressure that a saturated vapor will exert on top of its own liquid in a closed container. Usually, the higher the vapor pressure, the lower the boiling point, and therefore the more dangerous the material can be if flammable.

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