What Does an MSDS Mean?

Terms Used on MSDSs
The MSDS Is for You

The material safety data sheet (MSDS) is one of those rare items that is elegantly functional. It can save your life.

The objective of the MSDS is to concisely inform you about the hazards of the materials you work with so that you can protect yourself and respond to emergency situations. The law states that you must have access to MSDSs and be taught to read and understand them.

This *MSDS Pocket Dictionary* will help you and your employer work more safely and intelligently. Enclosed is a straightforward explanation of what an MSDS can tell you about a material. Refer to the Terms and Abbreviations section for definitions of new words you encounter on MSDSs and in the pages that follow.

The MSDS is like a crystal ball; if you study it, you will see the future. Read your MSDSs and imagine how you would respond to emergencies and control your day-to-day exposures to materials.

Information on an MSDS is the summarization of facts from many sources. Training, knowledge, and understanding of the technical data on an MSDS will provide you with the skills, wisdom, and good judgment to safely deal with your occupational exposure to hazards. It will take some study to learn what an MSDS says. The real challenge, however, is to learn what an MSDS means.

The purpose of an MSDS is to tell you

- The material's physical properties or fast-acting health effects that make it dangerous to handle
- The level of protective gear you need
- The first aid treatment to be provided when you are exposed to a hazard
- The preplanning needed for safely handling spills, fires, and day-to-day operations
- How to respond to accidents

Living Things Are Fragile

The objective of the Right-to-Know law is to protect living things, specifically your fragile body! Materials can cause injury to you, your coworkers, and the environment in many ways. The MSDS tells you how.
Reading an MSDS

Section 1. Chemical Product and Company Identification

Information In This Section. Section 1 provides the name, address, and phone number of the company that produced the material, the MSDS’s date of issue (or most recent revision), and the name of the material. The name of the material on the MSDS must be spelled exactly as it is on the container you received. If it’s not, inform your supervisor; you might not have the correct MSDS.

If one generic MSDS is used to cover various grades of a material, all grades must be listed as well as any known synonyms. If an optional number or code is used by the manufacturer to help identify the MSDS, it should appear in this section, and on every consecutive page of the MSDS.

Why This Information Is Important. Thousands of materials with many similar names are found in workplaces. A mistake on the supplier’s part in sending you the wrong sheet needs to be caught immediately, before you put your trust in the wrong information. In addition, having the supplier’s phone number on the sheet can be a vital time-saver in the event of an accident involving the material or for requesting additional data.

Section 2. Composition/Information on Ingredients

Information in This Section. Section 2 lists the product’s individual hazardous chemicals and their relative percentages. The material’s corresponding CAS (Chemical Abstract Service) No.(s) must also be listed. All ingredients that meet the OSHA Hazard Communication standard criteria of a hazardous ingredient must be identified here.

Manufacturers may also choose to list active ingredients, significant ingredients regulated under other Federal, state, or local regulations, or a complete ingredient disclosure, including nonhazardous components. Complex mixtures recognized as single substances may be listed as single components. If any of the hazardous components is a trade secret, this will be indicated in lieu of identifying the component. Suppliers of such products must still provide health hazard data on the MSDS and additional information...
Terms and Abbreviations on Labels and MSDSs

**Abatement.** Generally refers to a reduction in pollution either partially or completely.

**Absolute.** A chemical substance relatively free of impurities, e.g., absolute alcohol.

**Absolute Pressure.** The total pressure within a vessel, pipe, etc., not offset by external atmospheric pressure. See psia, psig.

**Absorb.** To soak up. The incorporation of a liquid into a solid substance, as by capillary, osmotic, solvent, or chemical action. See Adsorb.

**Acclimatization.** The physiological and behavioral adjustments of an organism to changes in its environment.

**Acetylcholine.** A compound formed in the body and released at nerve endings to transmit nerve impulses.

**ACGIH.** American Conference of Governmental Industrial Hygienists. An organization of professionals in governmental agencies or educational institutions engaged in occupational safety and health programs. ACGIH develops and publishes recommended occupational exposure limits for chemical substances and physical agents (see TLV and BEI). (1330 Kemper Meadow, Cincinnati, OH 45240; [513] 742-2020.)

**Acid.** An inorganic or organic compound that: 1) is usually corrosive to human tissue and must be handled with care; 2) has a pH of less than 7.0; 3) neutralizes bases (alkalis) to form salts; 4) dissociates in water yielding hydrogen or hydronium ions; 5) may react with metals to yield hydrogen; and 6) turns litmus paper red.

**Acidosis.** A condition of decreased alkalinity of the blood and tissues. Symptoms may include sickly sweet breath, headache, nausea, vomiting, visual disturbances; usually the result of excessive acid production. Tissues and CNS functions are disturbed.

**Acrid.** Irritating and bitter (referring to smell).

**ACS.** American Chemical Society. Professional society that establishes standards of purity for a number of reagents, e.g., the ACS Reagent Grade. They publish Chemical Abstracts and a host of professional journals and magazines dealing with various areas of chemistry, chemical engineering, and allied sciences. (1155 Sixteenth St., N.W., Washington, DC 20036; [202] 872-4567.)

**Action Level.** The exposure level (concentration in air) at which OSHA regulations to protect employees