

MATERIAL SAFETY DATA SHEETS



SOLID WASTE SECTION

WHAT IS A MATERIAL SAFETY DATA SHEET (MSDS)?

A Material Safety Data Sheet, or MSDS, is a document that provides information about the hazards of a chemical or product. The Federal Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) requires manufacturers or distributors of chemicals to issue MSDSs with the first shipment of any hazardous chemical product, and the employer is responsible for having them available to all workers. MSDS's vary in style and content, but manufacturers must communicate certain information to the purchaser for workers safety.

WHO IS THE MSDS FOR?

The MSDS is designed to provide both workers and

The image shows a sample Material Safety Data Sheet (MSDS) form. At the top, it is titled "MATERIAL SAFETY DATA SHEET" and includes fields for "PRODUCT NAME", "MSDS NUMBER", "MSDS DATE", "EMERGENCY PHONE #:", "PRODUCT CODE", and "KEY NUMBER". The form is for "FZX Corporation" and includes a logo and the website "http://www.EZ-Forms.com". The form is divided into several sections: 1. IDENTIFICATION, 2. PHYSICAL DATA, 3. INGREDIENTS, and 4. FIRE AND EXPLOSION HAZARD DATA. Each section contains various fields for chemical information, such as chemical name, CAS number, molecular weight, appearance, color, odor, pH, and specific gravity. There are also color-coded hazard diamonds for Health, Fire, and Reactivity, and a specific hazard section with a hazard symbol (W).

emergency personnel with the proper procedures for handling or working with a particular substance. In addition to giving information about the nature of a chemical, MSDS's also provide guidance to working safely with a chemical, how to store it and what to do if there is an accidental spill.

COMPONENTS OF A TYPICAL MSDS:

- I. **Chemical Identity:** The chemical and common name(s) must be provided for each chemical.
- II. **Manufacturer's Information:** Name, address, phone number and emergency phone number of the manufacturer.

- III. **Hazardous Ingredients:** Provides a list of hazardous chemicals. Depending on the state, the list may contain all chemical ingredients even if they are not hazardous, or only those chemical ingredients which have OSHA standards. Since



chemicals are often known by different names, all common (trade) names should be listed. The OSHA Permissible Exposure Limit (PEL) and Threshold Value Limit (TLV) are listed in this section.

- IV. **Physical/Chemical Characteristic:** Examples are vapor density, vapor pressure, flash point, flammable limits, boiling point, melting point etc. Common parameters such as color, appearance and odor, will help identify the product and bring attention to a chemical that may be decomposing.
- V. **Fire and Explosion Hazards:** The fire hazards (flammable or combustible) of the chemical and the conditions under which it could ignite or explode must be identified. Also informs you of the lowest temperature when the chemical could catch fire (flash point). Fire fighting methods and extinguishing agent of choice should be listed.

- VI. **Reactivity Data:** This should explain how certain materials react with other when mixed or stored together. Describes conditions like heat and water, than can cause the chemical to react. The

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chemical is called “incompatible” or “unstable” in these conditions.

VII. **Health Hazards:** This section describes the health effects (acute=immediate: chronic= long term), and the primary routes of exposure such as inhalation, ingestion, skin, or eyes. This section should also list the symptoms of exposure that could occur from acute or chronic exposure, along with first aid procedures.

FACT

An MSDS is not required by law to list any carcinogenic components under 0.1% and non-carcinogenic components under 1%. This should be taken into consideration for disposal.

VIII. **Precautions for Safe Handling and Use:** This section will provide guidance in case of material spill or leak. Information regarding safe handling and storage must be included. Sometimes there will be proper disposal information listed in this section.

WHERE CAN YOU GET AN MSDS?

- At your workplace; all workers must have easy access to them.
- The employer must request them from the distribution that sold the materials: workers can also request them.

IX. **Control measures:** Control measures are those taken to protect individuals from exposure. These include engineering controls, type of respiration/filter to use, personal protective equipment (PPE), and special information necessary to prevent exposure.

LABELING OF CHEMICALS

Labels on purchased chemicals must include:

- The common name of the chemical
- and emergency phone number of the company responsible The name, address for the product
- An appropriate hazard warning. The warning may be a single word such as “danger”, “warning” or “caution” or may identify the primary hazard, both physical (i.e., water reactive, flammable or explosive) and health (i.e., carcinogen, corrosive, or irritant).



ADDITIONAL RESOURCES

- Call NIOSH, toll free at (800) 359-4674 for information about chemical identities and health effects.
- Call your State OSHA or Federal OSHA if the MSDS information is not accurate or you seek more guidance.
- Material Safety Data sheets can be found online.

You have the right to know!