

# ***Material Safety Data Sheets: Your Key To Chemical Safety***

Anna is a new maintenance employee in the tool room. On her first day at work she needed to clean a bolt that she had removed from a piece of equipment. Anna went to the parts washer and started cleaning the bolt. A few minutes later she was having severe swelling, redness and pain in her hands. Anna was having a reaction to the chemical in the parts washer.

Could this type of accident have been prevented? The answer is yes. If Anna had taken a moment to review the Material Safety Data Sheet (MSDS) for the cleaning material, she would have seen that gloves were required when working with that substance.

Let's look at the details of an MSDS. Manufacturers of chemical products are required to provide an MSDS to the users of these products. The MSDS is designed to provide the user of a chemical with information on how to safely work with, handle and store the material.

An MSDS contains the following information:

- Hazard Symbols: These should be included so they can be seen at first glance.
- Manufacturer Identification: Name, address and phone numbers.
- MSDS Preparation Date: The date of MSDS preparation and/or revision dates.
- Hazardous Ingredients: The name of the material and the name of the chemicals used to make the material, with exceptions for trade secrets in some circumstances. There should also be information about permitted exposure limits for the chemical.
- Physical/Chemical Characteristics: Information specific to the ingredients such as the boiling point, vapor pressure, specific gravity, reactivity and pH.
- Physical Hazards: Information about the flash point, extinguishing media, explosive limits and unusual hazards associated with the material.
- Health Hazards: Information about the routes of entry, effects of short and long-term exposure, effects of overexposure, effects of skin and eye contact or ingestion, and carcinogenicity.
- General Handling Precautions: Information about what Personal Protective Equipment is required when working with the material - including skin, eye and respiratory protection. It may also include ventilation requirements and other special precautions and protective measures.

- Spill/Leak Control Measures: Information outlining steps to be taken in the event of a spill or release of the material.

- Emergency and first aid procedures: Information about first aid and medical actions to be taken for inhalation, skin or eye contact, and ingestion of the material.

Once an MSDS has been provided to the buyer of the material, each employee who uses the material must receive special training about how to safely use the substance. In addition, the MSDS must be made available for review by any employee who uses the material.

To ensure your personal safety, you should always review the MSDS for the material before you use it. Make sure you understand what protective equipment is required and what precautions to take when working with the material. The MSDS is your key to safety when working with chemical materials.