

# What to Look for on a Material Safety Data Sheet (MSDS)

## Protect yourself by understanding the chemicals you work with!

The MSDS will give you this information:

### Product Identification

The name of the substance and product number, the name and address of the manufacturer, and usually a **phone number for emergencies** and more information.

### Hazardous Ingredients

Ingredients that might be **dangerous**, and safe exposure limits such as

**Product Name:** Glassodur-Hardener Very Fast  
**Ingredients:**  
**Chemical Entity: CAS No: Proportion (%):**  
Polyisocyanate ----- 30-60%  
Butyl acetate 123-86-4 10-30%  
Xylene 1330-20-7 10-30%  
Hexamethylene diisocyanate 822-06-0 < 1%  
Ingredients determined not to be hazardous to 100%

Permissible Exposure Limit or PEL (set by OSHA) or the Threshold Value Limit or TVL. It also lists common names for the chemical.

### Physical Characteristics

Many physical qualities of the chemical, and **what's usual or safe**. For example, how the chemical looks and smells; boiling and melting temperatures (important in case a chemical might become a gas you might breath); evaporation rate (known as percent volatile); how easily the chemical dissolves; and how heavy it is (this tells you if it will sink, float or dissolve in water).

### Fire and Explosion Data

The lowest temperature when **the chemical could ignite** (flash point); if it's flammable (catches fire below 100 degrees F) or combustible (catches fire above 100 degrees F); and the best way to put out a fire involving this chemical.

### Reactivity

What happens if this chemical comes in contact with air, water or other chemicals; which conditions (like heat) or materials (like water) can cause the chemical to react by **burning, exploding or releasing dangerous vapors**. In that case, the chemical is called "incompatible" or "unstable" with these conditions or substances.

#### Health Effects

##### Acute

**Skin:** Contact with the skin may result in moderate to severe skin irritation. Will have a degreasing action on the skin. Repeated or prolonged exposure may lead to dermatitis  
**Inhaled:** Vapour or aerosol can cause irritation of the mucous membranes and respiratory tract. Symptoms may include sore dry throat, burning sensation in the nose and throat, chest tightness shortness of breath, difficulty in breathing, headaches, dizziness or nausea. Inhalation of very high concentrations may cause central nervous system depression which can lead to loss of coordination, impaired judgment and unconsciousness and or an asthma like condition. Respiratory sensitization might develop after a single high exposure to isocyanate and result in difficulty breathing, coughing and asthma.

### Health Hazards

Ways the chemical might enter your body, like splashing on your skin or being breathed in as vapor, as well as possible symptoms of overexposure. The MSDS lets you know if overexposure might make existing medical conditions worse, and describes **emergency first aid** procedures.

### Usage, Handling, And Storage

**How to clean up an accident**, spill, leak or release, including special procedures; how to handle, store and dispose of chemicals safely. Remember, if there is a spill, don't handle it yourself if you don't know the correct procedure, including what protective equipment to wear.

### Special Protection and Precautions

What **Personal Protective Equipment** to use when working with the chemical, special procedures, extra health and safety information, signs that should be posted and other information.

**Personal Protection:** An organic vapour cartridge respirator is recommended to minimize exposure to solvent vapours during mixing. **Use a full-face supplied-air respirator...if the product is sprayed, heated or used in a confined space.** Suitable hand, eye and body protection, for example nitrile rubber gloves, goggles and overalls, should be worn when mixing or spraying. Use an approved particulate respirator if dry sanding recently applied polyurethane paint films.