# **Reading Material Safety Data Sheets**

A material safety data sheet—the MSDS—is designed to tell you everything you need to know to use a chemical safely. Although there are many different types of MSDSs, each must include the eight parts listed below.

#### **Chemical Name**

- the name on the label
- date the MSDS was prepared
- name and address of the manufacturer
- phone number for emergencies

## Hazardous Ingredients/ Chemical Identity

- names of dangerous substances in the chemical
- safe exposure limits such as PEL (Permissible Exposure Limit) or TVL (Threshold Value Limit)
- common names for the chemical

## **Physical Characteristics**

- · how it looks and smells
- boiling and melting temperatures
- evaporation rate (percent volatile)
- how easily it dissolves
- how heavy it is—so you know whether it will sink, float or dissolve in water

#### **Fire and Explosion Data**

- the "flash point"—the lowest temperature in which it could catch fire
- whether it's flammable or combustible
- the best way to put out a fire involving the chemical

#### Reactivity

• conditions that can cause it to burn, explode or release

- dangerous vapors
- · substances that react with it

#### **Health Hazards**

- the dangers of inhaling or touching it
- first aid procedures
- dangers for people with medical conditions

### Usage, Handling and Storage

• how to clean up a spill or leak

how to handle, store and dispose of the chemical

## Special Protection and Precautions

- personal protective equipment that should be used
- other equipment for working with the chemical
- special procedures
- signs that might be posted
- information not covered in other sections

Material Safety Data Sheet May be used to comply with SORM's Hazard Communication Standard, 29 CPR 1910 1200. Standard must be consulted to specific requirements.  IDENTITY (As Used on Label and Last)		U.S. Department of Labor Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072			
		Note Blank spaces are not permitted if any item is not applicable, or no information is available, the space must be marked to indicate that			
Section I					
Manufacturer's Name		Emergency Telephone Number			
Address (Number, Street, City, State, and ZIP Code)		Telephone Number for Information			
		Date Prepared			
		Signature of Preparer (optional)			
Section II — Hazardous Ingredients/Id	entity Information	<u> </u>			
Hazardous Components (Specific Chemical Identity, Common Name)		OSHA PEL ACGIH TLV		Other Limits Recommender	d % (optional)
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Section III — Physical/Chemical Chara	cteristics				
Boiling Point		Specific Gravity (H <sub>2</sub> O - 1)			
Vapor Pressure (mm Hg.)		Meting Point			
Vapor Density (AIR = 1)		Evaporation Rate (Butyl Acetate = 1)			
Solubility in Water		IBUIYI ACEIAIE -	1)		
Appearance and Odor					
Section IV — Fire and Explosion Haza	rd Data				
Flash Point (Method Used)		Flammable Limit	s	LEL	UEL
Extinguishing Media					
Special Fire Fighting Procedures					
Unusual Fire and Explosion Hazards					

Always read the MSDS before working with any chemical!

HazCom