

Integrated Pest Management



SCHOOL IPM

for Iowa Schools

Material Safety Data Sheets (MSDS)

The Material Safety Data Sheets (MSDS) for each hazardous chemical describes how to use, handle and safely store the chemical safely. Each MSDS may appear different from another, but all provide basic information in 15 areas.

Chemical Identification: lists the chemical name, any trade names and the manufacturer's name and address.

Ingredient Information: lists the chemicals that may harm you. It lists the concentration that you can be safely exposed to as **PEL** (Permissible Exposure Limit) or **TLV** (Threshold Limit Value).

Physical Data: describes the appearance, odor and other characteristics of the chemical. Percent Volatile is an indication of how easily the chemical evaporates into the air as fumes. No indication is given, however, as to the danger of these fumes.

Hazards Identification: describes poisoning symptoms (e.g., rash, difficulty in breathing, headache, dizziness, etc.).

First Aid Measures: first aid and emergency procedures are provided, in addition to medical conditions that may be aggravated due to exposure.

Reactivity Data: lists products that should not be mixed with the chemical because of danger of explosion or release of toxic gases. Also gives information as to which conditions to avoid (e.g., exposure to sunlight, heat).

Fire and Explosion Data: temperature required for product ignition.

Flammable is the term given to a product with a flash point of less than 100°F, whereas a **Combustible** product has a flash point greater than or equal to 100°F. Provides special fire fighting procedures and guidance.

Accidental Release Measures: provides methods and materials needed to clean up an accidental spill. Indication of special precautions and equipment needed in clean up. Provides instructions as to disposal of spilled materials.

Protective Equipment: reviews special equipment needed when handling or applying the chemical. Lists proper storage and handling procedures.

Toxicology Information: lists known mammalian toxicity information for the chemical. Acute and chronic data (as available) are provided. Special statements as to birth defects, ability of chemical to cause cancer and reproductive harm included as appropriate.

Ecological Information: describes toxicity concerns for wildlife. Provides statements to minimize or eliminate harm to the environment by use of chemical.

Disposal Considerations: provides statements on proper disposal of unused chemical and empty containers.

Transport Information: classifies the chemical for shipping precautions.

Regulatory Information: lists how the chemical is affected by federal legislation.

Special Precautions: a general information section.

It is very important for anyone involved in an accident or other dangerous incident involving the chemical to immediately contact a supervisor or call the emergency number listed in the document. MSDS are intended as a safeguard to health; each product's MSDS should be read carefully and understood prior to using the chemical. MSDS must be supplied to anyone who requests a copy.