

Workplace Hazardous Materials Information System (WHMIS)

SAFETY DATA SHEET

Update Safety Data Sheets (SDS) every three years and whenever new information is available on the controlled product. The following 16 sections must be included.

Section 1 Identification:

Identify the product and manufacturer/distributor contact name, address, phone number, emergency phone number, recommended use and/or restrictions on use

Section 2 Hazards identification:

Include the chemical signal word, list all hazard statements, list all precautionary statements and include all necessary hazard symbols

Section 3 Composition/information on ingredients:

Information on chemical ingredients and trade secret claims

Section 4 First aid measures:

Inform of short and long term symptoms/effects and treatment for someone who has been harmfully exposed to the product.

Section 5 Fire-fighting measures:

Detail flammability and explosion risks as well as extinguishing techniques

Section 6 Accidental release measures:

Detail emergency procedures, protective equipment, proper method for containment and cleanup

Section 7 Handling and storage:

Precautions for handling, storage, incompatibilities

Section 8 Exposure controls/personal protection:

List OSHA's Permissible Exposure Limits (PELs), Threshold Limit Values (TLVs), Personal Protective Equipment (PPE) and appropriate engineering controls

Section 9 Physical and chemical properties:

Chemical's characteristics

Section 10 Stability and reactivity:

Chemical stability and possibility of hazardous reactions

Section 11 Toxicological properties:

Routes of exposure, related symptoms, acute and chronic effects, numerical measures of toxicity

Section 12 Ecological information*

Section 13 Disposal considerations*

Section 14 Transport information*

Section 15 Regulatory information*

Section 16 Other information:

Any other pertinent information so long as it does not contradict the required SDS information

*May be required by some agencies and/or governments

HAZARD SYMBOLS



CLASS A - Compressed Gas

Any material that is a gas at normal temperature and pressure, that is chilled or stored under high pressure in a cylinder. The cylinder may explode or burst when heated, dropped, or damaged.

Examples: Compressed Air, Hydrogen, Nitrogen, Carbon Dioxide, & Welding Gases



CLASS D - DIVISION 2 - Poisonous & Infectious Material

Other Toxic Effects - Poisonous substance that may cause irritation and damage to ones' health over repeated exposures. Known to cause birth defects, cancer, and/or permanent damages.

Examples: Mercury, Acetone, Benzene, & Lead



CLASS B - Flammable & Combustible Material

Material will ignite and continue to burn if exposed to heat, sparks, or flames. Many laboratory solvents and cleaning agents contain these materials.

Examples: Ethanol, Gasoline, Propane, & Hydrogen



CLASS D - DIVISION 3 - Poisonous & Infectious Material

Biohazards Infectious Materials - Materials that may cause disease or serious illness, while drastic exposures may result in death. Materials which present risk or danger of biological or viral infection on contact.

Examples: Biomedical waste, used syringes, needles, & sharps



CLASS C - Oxidizing Material

Materials which release oxygen or other oxidizing substances and contribute to combustion of flammable materials. May cause fire or explosion upon contact with wood, fuels, or other combustible materials.

Examples: Chlorine & Hydrogen Peroxide



CLASS E - Corrosive Material

Corrosive materials may cause burns to the eyes, skin or respiratory system and may result in permanent damage to human tissues and organs. They may also attack metals and other substances.

Examples: Nitric Acid, Ammonia, & Fluorine



CLASS D - DIVISION 1 - Poisonous & Infectious Material

Immediate & Serious Toxic Effects - Acutely toxic materials that may be fatal or severely and/or permanently damage ones' health in a single exposure.

Examples: Cyanide Compounds & Styrene



CLASS F - Dangerously Reactive Material

Described as "unstable" material. May react violently when exposed to light, heat, vibration, or extreme temperatures and cause explosion, fire or release of toxic gases.

Examples: Ethyl Acrylate, Vinyl Chloride, & Picric Acid

This guide is for general purposes only. It is not a substitute for review of applicable standards. Consult SDS for further instruction. MSDS should be replaced with an SDS from the supplier for most accurate information and compliance.

LABEL LAYOUTS

Properly placed labels around controlled products inform workers of the potential hazards and how to protect themselves. There are three WHMIS label types:

SUPPLIER LABELS

Quick Clean Paint Stripper

DANGER POISONOUS/FLAMMABLE

- Keep away from heat sparks and flame.
- Avoid contact with eyes and skin.
- Do not inhale vapors or mist.
- Do not swallow.
- Harmful if absorbed through the skin.

DANGER POISON/INFLAMMABLE

- Garder loin de la chaleur, des étincelles et de la flamme.
- Éviter tout contact avec les yeux et la peau.
- Ne pas respirer les vapeurs.
- Ne pas absorber.
- Noctif, si absorbé par la peau.

PRECAUTIONS

- Wear chemical goggles and resistant gloves.
- Wash thoroughly after handling.
- Keep container tightly closed.

PRECAUTIONS

- Porter des lunettes protectrices et des gants résistants.
- Se laver minutieusement les mains après usage.
- Garder le contenant bien fermé.

FIRST AID

- Contains METHANOL (39%)
- In case of contact, flush eyes and skin with water for 15 minutes.
- If swallowed, induce vomiting.
- Get medical attention immediately.

PREMIERS SOINS

- En cas de contact avec les yeux ou la peau, laver à grande eau pendant 15 minutes.
- Si avalé, provoquer le vomissement.
- Obtenir des soins médicaux immédiats.

**SEE SAFETY DATA SHEET
VOIR FICHE SIGNALÉTIQUE**

Acme Chemical Company
555 Testville Ave.

- A. Product Name
- B. Identifier & Risks
- C. Precautions
- D. First Aid
- E. Cross-Hatched Border
- F. Reference to the SDS
- G. Supplier Information
- H. Hazard Symbols
- I. Information in English & French

WORKPLACE LABELS

METHANOL

Wear chemical goggles and resistant gloves. Wash thoroughly after handling. Keep container tightly closed.

Refer to Safety Data Sheet for more information

- A. Product Name
- B. Safe Handling Information
- C. Reference to the SDS

LABORATORY LABELS

METHYLENE CHLORIDE

Contains: Methylene Chloride 39%

Keep away from heat sparks and flame. Avoid contact with eyes and skin. Wear chemical goggles and resistant gloves and wash thoroughly after handling. Keep container tightly closed. Call (555) 555-5555 for more information.

Refer to Safety Data Sheet for more information

Acme Chemical Co. 555 Testville Ave.

- A. Product Name
- B. Listing of Chemicals
- C. Emergency Phone Number
- D. Supplier Name

PERSONAL PROTECTIVE EQUIPMENT (PPE)



WHMIS CHECKLIST

- A supplier label is present on the controlled product.
- The SDS is readily available and easy to find.
- The hazard symbols used on the label are easy to recognize and understand.
- It is clear what precautions should be taken when working with the product.
- A workplace label is in use if the product was moved to a new container or the supplier label is illegible.
- Emergency safety procedures are present and clear.

MANUFACTURER

- The manufacturer has supplied correct WHMIS labels and SDSs.

EMPLOYER

- Safe employee working procedures are in place.
- WHMIS training is provided for employees on a regular basis.
- SDSs are readily available and accurate.
- Workplace labels are supplied as required.

EMPLOYEE

- The employee has undergone WHMIS training on a regular basis.
- Information learned during training is used in the workplace daily.
- Informs employer if SDSs or labels are out of date or missing.
- The specified PPE is in use when working with controlled products.

Scan for custom WHMIS label solutions.

