



Material Safety Data Sheet

LA1629
Methylene chloride

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: LA1629
Product Name: Methylene chloride
Synonyms: Dichloromethane.
Chemical Family: Halogenated aliphatic hydrocarbon.
Application: Solvent. Paint stripper

Distributed By:
Univar Canada Ltd.
9800 Van Horne Way
Richmond, BC
V6X 1W5

Prepared By: The Environment, Health and Safety Department of Univar Canada Ltd.

Preparation date of MSDS: 27/Apr/2015

Telephone number of preparer: 1-866-686-4827

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2. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact: May cause pain disproportionate to the level of irritation to eye tissue. May cause moderate eye irritation which may be slow to heal. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness.

Skin Contact: Prolonged or repeated exposure may cause skin irritation, even a burn. May cause drying and flaking of the skin. Extensive skin contact with methylene chloride, such as immersion, may cause an intense burning sensation, followed by a cold, numb feeling which will subside after contact. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Inhalation: In confined or poorly ventilated areas, vapors can readily accumulate and can cause unconsciousness and death. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). May cause carboxyhemoglobinemia, thereby impairing the blood's ability to transport oxygen. Minimal anesthetic or narcotic effects may be seen in the range of 500-1000 ppm methylene chloride. Progressively higher levels over 1000 ppm can cause dizziness, drunkenness, and as low as 10,000 ppm, unconsciousness and death. These high levels may also cause cardiac arrhythmias (irregular heartbeats).

Ingestion: Single dose oral toxicity is low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percentage (W/W)	LD50s and LC50s Route & Species:
Dichloromethane 75-09-2	99.9	Oral LD50 Rat > 2000 mg/kg

Note: No additional remark.

4. FIRST AID MEASURES

Eye Contact: Remove contact lenses, if present, after the first five minutes, then continue rinsing. Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder before reuse.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Notes to Physician: Treatment based on sound judgment of physician and individual reactions of patient. Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. Carboxyhemoglobinemia may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. Maintain adequate ventilation and oxygenation of the patient.

5. FIRE FIGHTING MEASURES

Flash Point: None.

Flash Point Method: Tag Closed Cup

Autoignition Temperature: 556°C /1033°F

Flammable Limits in Air (%): Lower: 14% Upper: 22%

Extinguishing Media: Use DRY chemicals, CO₂, alcohol foam or water spray.

Special Exposure Hazards: Isolate and restrict area access. Stay upwind. Although this product does not have a flash point it can burn at room temperature. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure build-up which could result in container rupture. Use water spray to cool fire-exposed containers and structures. Water fog, applied gently may be used as a blanket for fire extinguishments. Move containers from fire area if you can do it without risk. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Hazardous Decomposition/Combustion Materials (under fire conditions): Hydrogen chloride. Carbon monoxide. Carbon dioxide. Phosgene. Chlorine.

Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: HEALTH 2, FLAMMABILITY 1, INSTABILITY 0

HMIS RATINGS FOR THIS PRODUCT ARE: HEALTH 2, FLAMMABILITY 1, REACTIVITY 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed.

Procedure for Clean Up: Isolate hazard area and restrict access. Ventilate area. Small spills: soak up with absorbent material and scoop into containers. Large spills : prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. HANDLING AND STORAGE

Handling: To avoid uncontrolled emissions vent vapor from container to storage tank. Containers, even those that have been emptied, will retain product residue and vapor and should be handled as if they were full until they have been cleaned. Do not cut, drill, grind, weld or perform similar operations on or near containers. Vapors are heavier than air and will collect in low areas. Do not enter these areas where vapors of this product are suspected unless special breathing apparatus is used and an observer is present for assistance. Manual operations (such as cold cleaning or paint stripping) using methylene chloride should be engineered to provide for confining solvent vapors, adequate ventilation and/or respiratory protection to reduce the potential for overexposure to vapors. Wear all protective equipment.

Storage: Keep containers tightly closed. Store in a cool, dry, well ventilated area. Significant vapor pressure (greater than 5 psi) can be generated above 55 °F. This may result in venting or rupture. Do not store in aluminum, zinc, aluminum alloys and plastics. Product should not be packaged in aluminum aerosol cans or with finely divided aluminum or its alloys in an aerosol can. Product is denser than water. Product has a shelf life of 24 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Lethal concentrations may exist in areas with poor ventilation.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use an approved air-purifying or positive-pressure supplied-air respirator depending on the potential airborne concentration. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure airline with auxiliary self-contained air supply.

Gloves:

Use gloves chemically resistant to this material, examples of preferred glove barrier materials include: Polyvinyl alcohol gloves. Viton gloves. Examples of acceptable glove barrier materials include: Butyl rubber gloves. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.

Skin Protection: Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance. Impervious clothing.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

Ingredients	Exposure Limit - ACGIH	Exposure Limit - OSHA	Immediately Dangerous to Life or Health - IDLH
Dichloromethane	50 ppm TLV-TWA	1000 ppm Ceiling 500 ppm TWA 2000 ppm STEL	2300 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Colorless

Odor: Characteristic.

pH Not Available.

Specific Gravity: 1.320

Boiling Point: 39.8°C /104°F

Freezing/Melting Point: -96.7°C / -142°F

Vapor Pressure: 355 mmHg @ 20°C

Vapor Density: 2.93

% Volatile by Volume: 100%

Evaporation Rate: 28

Solubility: 2.0 g/100 g @ 25 C

VOCs: Not Available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Viscosity: 0.41 mPa.s Dynamic

Molecular Weight: 84.94 g/mol

Other: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid excessive heat, open flames and all ignition sources. Direct sunlight.

Materials to Avoid: Oxidizing agents. Strong bases. Amines. Aluminum powders, magnesium powders, potassium, sodium and zinc powder. Aluminum and alloys.

Hazardous Decomposition Products: Decomposition products can include and are not limited to: Hydrogen chloride. Chlorine. Phosgene.

Additional Information:

Water contamination may cause corrosion of metals due to formation of hydrochloric acid.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

Ingestion: Single dose oral toxicity is low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

Skin Contact: Prolonged or repeated exposure may cause skin irritation, even a burn. May cause drying and flaking of the skin. Extensive skin contact with methylene chloride, such as immersion, may cause an intense burning sensation, followed by a cold, numb feeling which will subside after contact. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

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Eye Contact: May cause pain disproportionate to the level of irritation to eye tissue. May cause moderate eye irritation which may be slow to heal. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness.

Additional Information: Observations in animals include irritation to the upper respiratory tract, liver or kidney effects. Exposure to this material may decrease the oxygen-carrying capacity of the blood.

Acute Test of Product:

Acute Oral LD50: Not Available.

Acute Dermal LD50: Not Available.

Acute Inhalation LC50: Not Available.

Carcinogenicity:

Ingredients	IARC - Carcinogens	ACGIH - Carcinogens
Dichloromethane	Group 2B	A3

Carcinogenicity Comment: No additional information available.

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: Methylene chloride can pass through the placenta and can be excreted in maternal milk. Did not cause birth defects in animals; other effects were seen in the fetus only at doses with caused toxic effects to the mother.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ingredients	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
Dichloromethane	140.8 - 277.8 mg/L LC50 (Pimephales promelas) 96 h flow-through 262 - 855 mg/L LC50 (Pimephales promelas) 96 h static 193 mg/L LC50 (Lepomis macrochirus) 96 h flow-through 193 mg/L LC50 (Lepomis macrochirus) 96 h static	Not Available.	500 mg/L EC50 Pseudokirchneriella subcapitata 72 h 500 mg/L EC50 Pseudokirchneriella subcapitata 96 h

Other Information:

Ecotoxicity: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 or EC50 >100 mg/L in the most sensitive species tested).

Bioconcentration potential is low. Potential for mobility in soil is very high. Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: DICHLOROMETHANE

DOT Hazardous Class 6.1

DOT UN Number: UN1593

DOT Packing Group: III

DOT Reportable Quantity (lbs): Not Available.

Note: No additional remark.

Marine Pollutant: No.

TDG (Canada):

TDG Shipping Name: DICHLOROMETHANE

Hazard Class: 6.1

UN Number: UN1593

Packing Group: III

Note: No additional remark.

Marine Pollutant: No.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

U.S. Regulatory Rules

Ingredients	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Dichloromethane	Not Listed.	Listed	Listed

California Proposition 65: Listed.

MA Right to Know List: Listed.

New Jersey Right-to-Know List: Listed.

Pennsylvania Right to Know List: Listed.

Additional Notes: Not Available.

WHMIS Hazardous Class:

D1B TOXIC MATERIALS

D2A VERY TOXIC MATERIALS

D2B TOXIC MATERIALS



16. OTHER INFORMATION

Additional Information:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Disclaimer:

NOTICE TO READER:

Univar, expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

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*****END OF MSDS*****