

## SAFETY DATA SHEET

# SDS00936 METHYLENE CHLORIDE

Preparation Date: 12/Aug/2022 Version: 1

## 1. IDENTIFICATION

**Product identifier** 

Product Name METHYLENE CHLORIDE

Other means of identification

Product Code(s) SDS00936

**Synonyms** Dichloromethane.

Recommended use of the chemical and restrictions on use

Recommended Use Solvent Paint stripper

Restricted Uses No information available

**Initial Supplier Identifier** 

Univar Canada Ltd. 9800 Van Horne Way Richmond, BC V6X 1W5 Telephone: 1-866-686-4827

**Emergency telephone number** 

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

## 2. HAZARD IDENTIFICATION

## Hazardous Classification of the substance or mixture

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

#### Label elements

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#### **Hazard pictograms**



## Signal Word: Danger

#### **Hazard statements**

Harmful if swallowed
May cause cancer
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
May cause drowsiness or dizziness
May cause damage to organe through

May cause damage to organs through prolonged or repeated exposure

## **Precautionary Statements**

#### **Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

#### Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

## **Storage**

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Other Information

Unknown acute toxicity

No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Chemical Name	CAS No	Weight-%	Synonyms
Dichloromethane	75-09-2	90 - 100%	Dichloromethane

## 4. FIRST AID

## **Description of first aid measures**

#### General advice

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

#### Inhalation

Remove to fresh air.

## Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

#### Skin contact

Wash skin with soap and water.

#### Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

## Most important symptoms and effects, both acute and delayed:

Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. May cause slight corneal injury. Prolonged or repeated exposure may cause skin irritation, even a burn. May cause pain disproportionate to the level of irritation to eye tissue. Single dose oral toxicity is low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Swallowing larger amounts may cause injury. 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). 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. May cause moderate eye irritation which may be slow to heal. Vapor may cause eye irritation experienced as mild discomfort and redness. May cause drying and flaking of the skin.

## Indication of any immediate medical attention and special treatment needed:

#### Note to physicians

Treatment based on sound judgment of physician and individual reactions of patient. 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. 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.

#### 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Specific hazards arising from the substance or mixture

Use water spray to cool fire-exposed containers and structures. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations. Stay upwind. Isolate and restrict area access. 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. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure build-up which could result in container rupture. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Although this product does not have a flash point it can burn at room temperature. Water fog, applied gently may be used as a blanket for fire extinguishments.

#### **Hazardous combustion products**

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

## Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

## **Environmental precautions**

See Section 12 for additional Ecological Information.

## Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Wear all protective equipment. Do not cut, drill, grind, weld or perform similar operations on or near containers. 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. 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. To avoid uncontrolled emissions vent vapor from container to storage tank. 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. Vapors are heavier than air and will collect in low areas.

#### Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Product has a shelf life of 24 months. 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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### **Exposure Limits**

Chemical Name	Alberta OEL	British Columbia	Ontario	Quebec OEL	Exposure Limit -	Immediately
		OEL			ACGIH	Dangerous to Life
						or Health - IDLH

Dichloromethane	TWA: 50 ppm	TWA: 25 ppm	TWA: 50 ppm	TWA: 50 ppm	50 ppm	2300 ppm
75-09-2	TWA: 174 mg/m <sup>3</sup>			TWA: 174 mg/m <sup>3</sup>	TLV-TWA	

Consult local authorities for recommended exposure limits

#### Appropriate engineering controls

#### **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.

## Individual protection measures, such as personal protective equipment

#### Eye/face protection

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

## **Hand protection**

Butyl rubber gloves. Polyvinyl alcohol gloves. Viton 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. Use gloves chemically resistant to this material, examples of preferred glove barrier materials include:. Examples of acceptable glove barrier materials include:.

## Skin and body 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.

#### 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.

#### General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

**Appearance** 

Physical stateLiquidColorColorlessOdorCharacteristic

Odor threshold No information available

PROPERTIES <u>Values</u> <u>Remarks • Method</u>

**pH** No data available none known

Melting point / freezing point -97 °C / -143 °F

Initial boiling point/boiling range 39.8 °C / 104 °F none known

Flash point No data available Tag Closed Cup

**Evaporation rate** 28

Flammability (solid, gas) No data available none known Flammability Limit in Air none known

Upper flammability limit: 22

none known

none known

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Lower flammability limit: 14

Vapor pressure 355 mmHg @ 20°C

Relative vapor density 2.93 **Specific Gravity** 1.320

Water solubility 2.0 g/100 g @ 25 C Solubility in other solvents No data available **Partition coefficient** No data available

556 °C / 1033 °F Autoignition temperature **Decomposition temperature** No data available

Kinematic viscosity 0.41 mPa.s Dvnamic

**Dynamic viscosity** No data available none known

**Explosive properties** No information available. Oxidizing properties No information available.

84.94 g/mol Molecular weight

**VOC Percentage Volatility** No information available **Liquid Density** No information available **Bulk density** No information available

## 10. STABILITY AND REACTIVITY

#### Reactivity/Chemical Stability

Stable under normal conditions

## Possibility of hazardous reactions

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

#### Hazardous polymerization

Will not occur.

## Conditions to avoid

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

#### Incompatible materials

Strong bases. Oxidizing agents. 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.

## 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

#### 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).

#### **Eve contact**

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

#### Skin contact

Prolonged or repeated exposure may cause skin irritation, even a burn. Prolonged skin contact is unlikely to result in absorption of harmful amounts. 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. May cause drying and flaking of the skin.

## Ingestion

Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. 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.

## Information on toxicological effects

#### **Symptoms**

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.

## Numerical measures of toxicity

## **Acute toxicity**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 1,602.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dichloromethane 75-09-2	= 1600 mg/kg (Rat)	Not available	= 53 mg/L (Rat) 6 h

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

## Skin corrosion/irritation

Prolonged or repeated exposure may cause skin irritation, even a burn. Prolonged skin contact is unlikely to result in absorption of harmful amounts. 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. May cause drying and flaking of the skin.

## Serious eye damage/eye irritation

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

## Respiratory or skin sensitization

No information available.

## Germ cell mutagenicity

No information available.

#### Carcinogenicity

No additional information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Dichloromethane	A3	Group 2A	Reasonably Anticipated	Х
75-09-2				

#### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

## Reproductive toxicity

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.

## Specific target organ systemic toxicity - single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

#### Specific target organ systemic toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

No information available.

## 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

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Chemical Name	Ecotoxicity - Freshwater	Ecotoxicity - Fish Species	Toxicity to	Crustacea
	Algae Data	Data	microorganisms	
Dichloromethane 75-09-2	500 mg/L EC50 Pseudokirchneriella subcapitata 72 h 500 mg/L EC50 Pseudokirchneriella subcapitata 96 h	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		EC50: 1532 - 1847mg/L (48h, Daphnia magna) EC50: =190mg/L (48h, Daphnia magna)
		LC50 (Lepomis		
		macrochirus) 96 h static		

Persistence and degradability No information available.

**Bioaccumulation** No information available.

**Component Information** 

Chemical Name	Partition coefficient
Dichloromethane	1.25
75-09-2	

Other adverse effects No information available.

## 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Do not reuse empty containers.

## 14. TRANSPORT INFORMATION

TDG (Canada):

UN Number UN1593

Shipping name DICHLOROMETHANE

Class 6.1 Packing Group

Marine pollutant Not available.

DOT (U.S.)

UN Number UN1593

Shipping name DICHLOROMETHANE

Class 6.1 Packing Group

Marine pollutant Not available

## 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

**U.S. Regulatory Rules** 

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Dichloromethane - 75-09-2	Not Listed	Listed	Listed

**International Inventories** 

TSCA Complies DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA: Health hazards 1 Flammability 1 Instability 0 Physical and

chemical properties -

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HMIS Health Rating: Health hazards \* 2 Flammability 1 Physical hazards 0 Personal protection

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Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

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

Preparation Date: 12/Aug/2017 Revision Date: 12/Aug/2017

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**End of Safety Data Sheet**