

Safety Data Sheet

Date of Issue: 6.10.2021 Date of Expiry: 6.10.2026

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : ECP Limited

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Emergency phone number : 0800 243 622 (24 hours)

Product Name	Methylene Chloride		
Product Code	9315		
CAS No.	75-09-2		

Recommended use : Laboratory Investigations

2: Hazard's identification

Health Hazards

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 31.

Target Organs

1. Respiratory tract irritation., Narcotic effect.

Label Elements Hazard Symbol





Signal Word: Danger

Hazard Statement: Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause cancer.

May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product.

Response: IF exposed or concerned: Call a POISON CENTER/doctor. IF SWALLOWED: Rinse mouth. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF **INHALED**: Remove person to fresh air and keep comfortable for breathing. **Storage**: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3: Composition/information on ingredients

Chemical Identity	CAS number	Content in percent (%) *	
Dichloromethane	75-09-2	99.0 - 100.0%	

4: First aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance

Ingestion: Rinse mouth thoroughly. Call a POISON CENTER/doctor if you feel unwell.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: Harmful if swallowed. Irritating to eyes, respiratory system, and skin.

Hazards: Narcotic effect.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5: Firefighting measures

General Fire Hazards: In case of fire and/or explosion do not breathe fumes.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, foam, dry powder, or carbon dioxide

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Fire may produce irritating, corrosive and/or toxic gases

Special protective equipment and precautions for firefighters

Special firefighting procedures: Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures: Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements, or confined areas. Stop the flow of material if this is without risk. Inform authorities if large amounts are involved.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7: Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Store in a well-ventilated place. Store in a dry place.

8: Exposure controls/personal protection

Appropriate engineering controls: No data available

Individual protection measures, such as personal protective equipment General information:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9: Physical and chemical properties

Appearance

Physical state : Liquid Form : Liquid Color : Colourless

Odor : Pleasant, sweet odour Odor threshold : No data available. pH : No data available.

Melting point/freezing point : -95 °C
Initial boiling point and boiling range : 39 - 40 °C
Flash Point : Not applicable
Evaporation rate : 0.71 (ether=1)
Flammability (solid, gas) : No data available.

Upper/lower limit on flammability or explosive limits
Flammability limit - upper (%) : 22 %(V)
Flammability limit - lower (%) : 13 %(V)

Explosive limit - upper (%) : No data available. Explosive limit - lower (%) : No data available. Vapor pressure : 58.00 kPa (25 °C)

Vapor density : 2.93 AIR=1.02
Density : 1.32 g/ml (20 °C)
Relative density : 1.33 (20 °C)

Solubility(ies)

Solubility in water : 20 g/l

Solubility (other) : ethanol: Miscible

Partition coefficient (n-octanol/water) : 1.25

Auto-ignition temperature : 600 - 615 °C

Decomposition temperature : No data available.

Viscosity : No data available.

Other information

Minimum ignition energy :> 1 J

Molecular weight : 84.93 g/mol

10: Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Excessive heat. Moisture. Contact with incompatible materials.

Incompatible Materials: Strong oxidizing agents. Caustics. Acids. Aluminium. Chemically active metals. May attack some plastics, rubber, and coatings.

Hazardous Decomposition Products: Oxides of Carbon. Hydrogen chloride. Phosgene

11: Toxicological information

Information on likely routes of exposure

Inhalation: May cause irritation to the respiratory system.

Skin Contact: Causes skin irritation. **Eye contact:** Causes serious eye irritation.

Ingestion: Harmful if swallowed.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): 1,600 mg/kg

Dermal

Product: LD 50 (Rat) > 2,000 mg/kg

Inhalation

Product: LC 50 (Rat, 6 h) 52 mg/l

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation

Product: Causes skin irritation.

Serious Eye Damage/Eye Irritation
Product: Causes serious eye irritation.

Respiratory or Skin Sensitization

Product: Not a skin nor a respiratory sensitizer. eye irritation.

Carcinogenicity

Product: May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Dichloromethane Overall evaluation: 2A. Probably carcinogenic to humans.

Germ Cell Mutagenicity

In vitro

Product: No mutagenic components identified

In vivo

Product: No mutagenic components identified

Reproductive toxicity

Product: Reproductive toxicity Product:

Specific Target Organ Toxicity - Single Exposure

Product: Narcotic effect

Specific Target Organ Toxicity - Repeated Exposure

Product: None known.

Target Organs

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation., Narcotic effect.

Aspiration Hazard Product: Not classified

Other effects: None known

12: Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50 (Fathead minnow (Pimephales promelas), 96 h): 140.8 mg/l

Aquatic Invertebrates

Product: EC 50 (Water flea (Daphnia magna), 48 h): 1,250 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.
Aquatic Invertebrates
Product: No data available
Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation

Product: Expected to biodegrade slowly

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential Bioconcentration Factor (BCF)

Product: No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: 1.25

Mobility in soil: No data available.

Other adverse effects: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13: Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	UN Number	1593	1593	1593
14.2	UN Proper	Dichloromethane	Dichloromethane	Dichloromethane
	Shipping name			
14.3	Transport	6.1	6.1	6.1
	Hazard Class			
14.4	Packaging group	III	III	III
14.5	Environmental	No	No	No
	Hazards			
14.6	Special	Not determined.		
	precautions for			
	user			

15: Regulatory information

Hazard categories

Acute toxicity (any route of exposure)
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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