

Safety Data Sheet

Dichloromethane

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Dichloromethane
Recommended Use: Science education applications
Synonyms: Methylene Chloride, Methylene Dichloride, DCM, Chlorinated Hydrocarbon
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer. May cause damage to organs through prolonged or repeated exposure.

GHS Classification:

Carcinogenicity Category 1B, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3, Acute Toxicity - Dermal Category 5, Acute Toxicity - Oral Category 5

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|--------------------------------|--------------|----------|
| Dichloromethane (CAS# 75-09-2) | 75-09-2 | 100% |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: 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.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Above flashpoint, explosive vapor-air mixtures may be formed.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

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Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Isolate area. Keep unnecessary personnel away.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Do not allow the spilled product to enter public drainage system or open waterways.

Section 7 Handling and Storage

- Handling:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as required. Keep container tightly closed in a cool, well-ventilated place. Retained residue may make empty containers hazardous.
- Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep container tightly closed in a cool, well-ventilated place.
- Storage Code:** Blue - Toxic. Store separately in a secured area.

Section 8 Protection Information

| Chemical Name | ACGIH | | OSHA PEL | |
|-------------------------------------|------------|--------|------------|--|
| | (TWA) | (STEL) | (TWA) | (STEL) |
| Dichloromethane (CAS# 75-09-2) 100% | 50 ppm TWA | N/A | 25 ppm TWA | 125 ppm STEL (see 29 CFR 1910.1052) |

Control Parameters

Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure. Vapor concentrations should be monitored and controlled in accordance with 29 CFR 1910.10.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with organic vapor cartridge.

Respirator Type(s):

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Eye Protection:

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Polyvinylalcohol, Polyethylene

Section 9 Physical Data

Formula: CH₂Cl₂
Molecular Weight: 84.93
Appearance: Colorless Liquid
Odor: Moderate Alcohol Odor
Odor Threshold: 144 ppm OT (May); 500 mg/m³ OT (May)
pH: No data available
Melting Point: -95 C
Boiling Point: 40 C
Flash Point: No data available
Flammable Limits in Air: LEL 13% UEL 23%

Vapor Pressure: 435 mmHg at 25 °C
Evaporation Rate (BuAc=1): 27.5
Vapor Density (Air=1): 2.93
Specific Gravity: 1.326
Solubility in Water: Soluble
Log Pow (calculated): 1.25
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: 100%

Section 10 Reactivity Data

Reactivity: Not generally reactive under normal conditions.

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Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Sparks, open flame, other ignition sources, and elevated temperatures. Ultraviolet light
Incompatible Materials: Strong oxidizing agents, Strong acids, Strong alkalies, Magnesium, Aluminum alloys, Alkaloids
Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry: Inhalation and ingestion.
Symptoms (Acute): Liver disorders, Impaired Kidney Function, Central Nervous System disorders,, Blood disorders
Delayed Effects: No data available

Acute Toxicity:

| Chemical Name | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------------------------|------------|----------------|----------------|---------------------------------------|
| Dichloromethane (CAS# 75-09-2) 100% | 75-09-2 | Not determined | Not determined | INHALATION LC50 Mouse 14400 ppm |

Carcinogenicity:

| Chemical Name | CAS Number | IARC | NTP | OSHA |
|-------------------------------------|------------|--------|--------|--------|
| Dichloromethane (CAS# 75-09-2) 100% | 75-09-2 | Listed | Listed | Listed |

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: See Section 2, Respiratory system, Central Nervous System
Chronic: N/A, Liver, Blood, Respiratory system

Section 12 Ecological Data

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.
Mobility: This material is expected to have high mobility in soil. It absorbs weakly to most soil types.
Persistence: Evaporation into atmosphere
Bioaccumulation: Bioconcentration is not expected to occur.
Degradability: Biodegrades quickly.
Other Adverse Effects: No data

| Chemical Name | CAS Number | Eco Toxicity |
|-------------------------------------|------------|---|
| Dichloromethane (CAS# 75-09-2) 100% | 75-09-2 | 96 HR LC50 LEPOMIS MACROCHIRUS 193 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 190 MG/L 96 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA > 500 MG/L 72 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA > 500 MG/L |

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name:
UN1593, Dichloromethane, 6.1, III

Air - IATA Proper Shipping Name:
UN1593, Dichloromethane, 6.1, III

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Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|--|------------|-----------------|----------|-----------------------------------|-----------|---------------|
| Dichloromethane (CAS# 75-09-2) 100% | 75-09-2 | Dichloromethane | No | 1000 lb final RQ; 454 kg final RQ | No | No |

California Prop 65: WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

Section 16

Additional Information

Revised: 09/09/2015

Replaces: 09/03/2014

Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

| | | | |
|--------|---|------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service Number | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL | Permissible Exposure Limit |
| DOT | U.S. Department of Transportation | ppm | Parts per million |
| IARC | International Agency for Research on Cancer | RCRA | Resource Conservation and Recovery Act |
| N/A | Not Available | SARA | Superfund Amendments and Reauthorization Act |
| | | TLV | Threshold Limit Value |
| | | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |