

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 527.00

Revision Date: April 2, 2001

---

### Section 1 — Chemical Product and Company Identification

---

## Methylene Chloride

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

---

### Section 2 — Composition, Information on Ingredients

---

Methylene Chloride

Synonym: dichloromethane

CAS#: 75-09-2

---

### Section 3 — Hazards Identification

---

Colorless, volatile liquid; penetrating ether-like odor.

Narcotic in high concentration. Slightly toxic by ingestion, inhalation and skin absorption. Possible carcinogen. Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen carrying capacity of the blood.

#### FLINN AT-A-GLANCE

Health-3  
Flammability-1  
Reactivity-1  
Exposure-3  
Storage-0

0 is low hazard, 3 is high hazard

---

### Section 4 — First Aid Measures

---

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Induce vomiting. After vomiting, give mixture of 2 Tbs. of activated charcoal mixed with one cup of water. Call a physician or poison control at once.

---

### Section 5 — Fire Fighting Measures

---

Combustible liquid.

Upper: 22% Lower: 14% Autoignition Temperature: 1223 F

When heated to decomposition, emits toxic fumes of Phosgene and Cl.

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

H-2  
F-1  
R-0

---

### Section 6 — Accidental Release Measures

---

Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

---

### Section 7 — Handling and Storage

---

Flinn Suggested Chemical Storage Pattern: Organic #4. Store with ethers, ketones, halogenated hydrocarbons and ethylene oxide. Store in a cool dry place. Use and dispense in a hood.

---

### Section 8 — Exposure Controls, Personal Protection

---

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 500 ppm (OSHA)

### Section 9 — Physical and Chemical Properties

Colorless, volatile liquid; penetrating ether-like odor.  
Solubility: Soluble in alcohol and ether; slightly soluble in water.

Formula: CH<sub>2</sub>Cl<sub>2</sub>

Formula Weight: 84.93

Specific Gravity: 1.335

Melting Point: -97 C

Boiling Point: 39-40 C

Vapor Pressure: 340 mm (20 C)

Vapor Density: 2.9

### Section 10 — Stability and Reactivity

Avoid contact with alkali metals, aluminum and heat.

Shelf life: Volatile liquid; keep tightly capped.

### Section 11 — Toxicological Information

Acute effects: Toxic, irritant, nausea, dizziness and headache

Chronic effects: Possible carcinogen, neurological hazard, possible mutagen

Target organs: Liver, pancreas, nerves

ORL-RAT LD50: 1600 mg/kg

IHL-RAT LC50: 88000 mg/m<sup>3</sup>/30M

SKN-RBT LD50: 1280 mg/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

### Section 12 — Ecological Information

Data not yet available.

### Section 13 — Disposal Considerations

Please consult with state and local regulations.

Flinn Suggested Disposal Method #27j is one option.

### Section 14 — Transport Information

Shipping Name: Dichloromethane

Hazard Class: 6.1, Keep away from food

UN Number: UN1593

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (200-838-9), RCRA code U080.

### Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

**FLINN SCIENTIFIC INC.**

"Your Safer Source for Science Supplies"

*Flinn Chemicals--Your Best Choice*

flinn@flinnsci.com www.flinnsci.com  
P.O. Box 219 Batavia IL 60510  
(800) 452-1261 Fax (866) 452-1436