

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 527.00

Revision Date: December 7, 2011

### 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 with a penetrating odor like ether.

Possible human carcinogen (IARC-2B).

Narcotic in high concentration. Slightly toxic by ingestion, inhalation, and skin absorption.

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 and 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 or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Do NOT induce vomiting. Rinse mouth. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Combustible liquid. No conventional flash point but does mix with air to become flammable.

Flammable limits: Lower: 14% Upper: 22% Autoignition Temperature: 556 °C

When heated to decomposition, may emit chlorine.

**Fire Fighting Instructions:** Use a 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 the area. Sweep up the spill, place in a 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 a 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: PEL 25 ppm, Ceiling 125 ppm (OSHA)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Colorless, volatile liquid with a penetrating odor like ether.  
Solubility: Soluble in alcohol and ether; slightly soluble in water.  
Formula: CH<sub>2</sub>Cl<sub>2</sub>  
Formula weight: 84.93

Boiling point: 39-40 °C  
Melting point: -97 °C  
Specific gravity: 1.335  
Vapor density: 2.9  
Vapor pressure: 340 mm

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with alkali metals, aluminum, and heat.  
Shelf life: Poor, 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 LD<sub>50</sub>: 1600 mg/kg  
IHL-RAT LC<sub>50</sub>: 88000 mg/m<sup>3</sup>/30M  
SKN-RBT LD<sub>50</sub>: 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 review all federal, state and local regulations that may apply, before proceeding.  
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**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**