

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 329.00

Revision Date: February 2, 2012

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Ethylene Dichloride

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

Ethylene dichloride

Synonym: 1,2-Dichloroethane

CAS#: 107-06-2

SECTION 3 — HAZARDS IDENTIFICATION

Colorless, oily liquid. Chloroform-like odor.

Possible human carcinogen (IARC-2B).

Moderately toxic by ingestion, inhalation, and skin absorption. Strong skin and eye irritant. Avoid all body tissue contact.

Flammable liquid.

FLINN AT-A-GLANCE

Health-2

Flammability-3

Reactivity-1

Exposure-3

Storage-3

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: Rinse mouth. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Class 1B flammable liquid.

Flash point: 13 °C Flammable limits: Lower: 6.2% Upper: 15.6% Autoignition Temperature: 413 °C

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

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-3

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. 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 dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor Can.

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 50 ppm, STEL 2 ppm (OSHA, NIOSH).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless, oily liquid with an odor like chloroform.
Solubility: Slightly soluble in water. Miscible: with most common organic solvents.
Formula: $C_2H_4Cl_2$
Formula weight: 98.96

Boiling point: 83.5 °C
Melting point: -36 °C
Refractive index: 1.4422
Specific gravity: 1.2454

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizers and aluminum.
Shelf life: Poor, gradually decomposed by air, light, and moisture.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, irritant, nausea, headache, vomiting, gastrointestinal disturbances.
Chronic effects: Causes dermatitis, possible mutagen.
Target organs: Liver, kidneys.

ORL-RAT LD_{50} : 670 mg/kg
IHL-RAT LC_{50} : 1000 ppm/7H
SKN-RBT LD_{50} : 2800 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: Ethylene dichloride
Hazard class: 3, Flammable liquid, poison
UN number: UN1184
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (203-458-1), RCRA code U077.

SECTION 16 — OTHER INFORMATION

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