

Material Safety Data Sheet



ETHYLENE DICHLORIDE

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Carolina Biological Supply Company

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

CAROLINA
www.carolina.com

Section 1 - Product Description

Product Name: Ethylene Dichloride

Product Code(s): 86-1670, 86-1672

Size: N/A

Chemical Name: Ethylene Dichloride

CAS Number: 107-06-2

Formula: ClCH₂CH₂Cl

Synonyms: 1,2-Dichloroethane, Ethylene Chloride, 1,2-Dichloroethane

Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Hazard Identification

Emergency Overview: Very toxic if swallowed. Harmful if swallowed.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation to skin.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Ethylene Dichloride (CAS# 107-06-2)

TLV units: ACGIH-TLV 10 ppm (TWA)

PEL units: OSHA-PEL 50 ppm (TWA); 200 ppm (STEL); 100 ppm (Ceiling)

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ... (Water, unless specified as a water reactive material).

Ingestion - If swallowed, rinse mouth with water (only if the person is conscious). If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): 13 °C (CC)

NFPA Rating:

Health: 2

Fire: 3

Reactivity: 0

Extinguisher Media: Use dry chemical, CO₂ or appropriate foam.

Flammable Limits in Air % by Volume: LEL: 6.2% UEL: 15.6%

Autoignition Temperature: 413 °C

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Vapours may travel back to ignition source. Closed Containers exposed to heat may explode.

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Harmful if swallowed.

After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.

Keep away from ... (incompatible materials to be indicated by the manufacturer).

Keep container tightly closed in a cool, well-ventilated place.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: 98.96

Boiling Point: 83.5 °C

Vapor Density(Air=1): 3.4

Percent Volatile by Volume: 100%

Solubility in Water: Soluble

Melting Point: - 36 °C

Vapor Pressure: 86 hPa at 20°C

Specific Gravity (H₂O=1): 1.25 at 20°C

Evaporation Rate (BuAc=1): N/A

Appearance and Odor: Clear, colorless liquid, Sweet odor.

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Keep away from ... (incompatible materials to be indicated by the manufacturer).

Direct sunlight; Product is photosensitive.

Heat and sources of ignition.

Incompatibility (Materials to Avoid): Ammonia, Metals, Alkalis, Peroxides, Acids, Oxidizers,

Hazardous Decomposition Products: Fire or excessive heat may produce hazardous decomposition products.

Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: orl-rat LD50 670 mg/kg

Effects of Overexposure:

Acute: See Section 2

Chronic: Tumorigenic data cited. Reproductive data cited. Mutation data cited. Certain components or species of this product are considered potential carcinogens.

Conditions Aggravated by Overexposure: N/A

Target Organs: Liver, Kidneys,

Primary Route(s) of Entry: Inhalation, ingestion, eye or skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: U077

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: UN1184, Ethylene Dichloride, 3 (6.1), II

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Chronic Fire Acute

Name List:

Ethylene Dichloride - Yes

Chemical Category:

Ethylene Dichloride - No

CERCLA Section 103 RQ(lb.): Ethylene Dichloride - 100

RCRA Section 261.33: Ethylene Dichloride - U077

Section 16 - Additional Information

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. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

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