



Material Safety Data Sheet

1. Product and Company Identification

Product name : **Ethyl Chloride**

Chemical formula : C₂H₅Cl

Synonyms : None

Company : Specialty Gases of America, Inc
6055 Brent Dr.
Toledo, OH 43611

Telephone : 419-729-7732

Emergency : 800-424-9300

2. Composition/Information on Ingredients

Components	CAS Number	% Volume
Ethyl Chloride	75-00-3	100%

3. Hazards Identification

Emergency Overview

Flammable gas.
Contents under pressure.
Causes damage to kidneys, liver, mucous membranes, cardiovascular system, respiratory tract, skin, eyes, central nervous system, eye, lens or cornea.
Vapor may cause flash fire.
May cause skin and eye irritation.
Possible cancer hazard.
May cause cancer based on animal data.

Potential Health Effects

Inhalation : Act as a simple asphyxiant.
Eye contact : Moderately irritant to the eyes.
Skin contact : Moderately irritant to the skin.
Ingestion : Ingestion is not normal route of exposure for gases.
Chronic Health Hazard : Carcinogenic effects – Classified + (Proven.) by NIOSH. Classified A3 (Proven for animal.) by ACGIH, 3 (Possible for human.) by European Union. 3 (Not classifiable for human.) by IARC.

4. First Aid Measures

General advice : None.

Eye contact : In case of emergency, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. If frostbite occurs, try to warm

- up the frozen tissues and seek medical attention.
- Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

5. Fire-Fighting Measures

- Suitable extinguishing media : Use water spray (fog), foam, dry chemical, or CO2.
- Specific hazards : Extremely flammable in the presence of open flames, sparks and static discharge, of heat, of oxidizing materials.
- Special protective equipment for fire-fighters : If involved in a fire, shut off flow immediately if it can be done without risk. Apply water from a safe distance to cool container and protect surrounding area. Extremely flammable. Gas may accumulate in confined areas, travel considerable distance to source of ignition and flash back causing fire explosion. Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in a positive pressure mode.

6. Accidental Release Measures

- Personal precautions : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment. Shut off gas supply if this can be done safely. Isolate area until gas has dispersed.
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up : Not available.
- Additional advice : None.

7. Handling and Storage

Handling

Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire, minimize ignition sources. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Do not puncture or incinerate container. Wash thoroughly after handling. High pressure gas. Use equipment rated for cylinder pressure. Close valve after each use and when empty.

Storage

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Segregate from oxidizing materials.

8. Exposure Controls / Personal Protection

Engineering measures

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. The engineering controls also need to keep gas, vapor or dust concentrations below any explosive limits. Use explosion-proof ventilation equipment.

Personal protective equipment

- Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator

- selection must be on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection : Chemical resistant, impervious gloves or gauntlets complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin and body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9. Physical and Chemical Properties

- Form : Gas.
- Color : Colorless.
- Odor : Pungent, ether-like odor.
- Molecular weight : 64.52
- Vapor density : 2.2 (air = 1)
- Boiling point : 12.23 C (54F)
- Freezing point : -138.88 C (-218 F)
- Water solubility : Not available.
- Specific volume : 6.06428 ft³/lb

10. Stability and Reactivity

- Stability : Stable under normal conditions.
- Conditions to avoid : Contact with incompatible materials. Cylinders exposed to high temperatures or direct flame can rupture or burst.
- Materials to avoid : Oxidizing agents.
- Hazardous decomposition products : These products are halogenated compounds, hydrogen chloride.

11. Toxicological Information

Acute Health Hazard

- Ingestion : Not available.
- Inhalation : Not available.
- Skin : Not available.

12. Ecological Information

These products are carbon oxides (CO, CO₂) and water, halogenated compounds. The products of degradation are as toxic as the product itself. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

13. Disposal Considerations

- Waste from residues / unused products : Dispose of non-refillable cylinders in accordance with federal, state and local regulations. If the cylinders are refillable type, return cylinders to supplier with any valve outlet plugs or caps secured and valve protection caps in place.
- Contaminated packaging : Return cylinder to supplier.

14. Transport Information

DOT (US only)

Proper shipping name : Ethyl Chloride
Class : 2.1
UN/ID No. : UN1037
Labeling : Flammable Gas

Further information

Cylinders should be transported in a secure upright position in a well ventilated truck.

15. Regulatory Information

TCSA

Material is listed in TSCA inventory.

SARA 302/304/311/312 extremely hazardous substances

No products were found.

SARA 302/304 emergency planning and notification

No products were found.

SARA 302/304/311/312 hazardous chemicals

Chloroethane

16. Other Information

Prepared by : Specialty Gases of America, Inc.
For additional information, please visit our website at www.americangasgroup.com.