



Material Safety Data Sheet

1. Product and Company Identification

Product name : Cyclopropane
Chemical formula : C₃H₆
Synonyms : Trimethylene; Trimethylene (CYCLIC); Cyclic Trimethylene; UN 1027
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
Cyclopropane	75-19-4	100%

3. Hazards Identification

Emergency Overview

May cause central nervous system depression.
Flammable gas. May cause flash fire. Dust/air mixtures may ignite or explode.

Potential Health Effects

Inhalation : Mild irritation, nausea, vomiting, irregular heartbeat, headache, drowsiness, symptoms of drunkenness, convulsions, coma.
Eye contact : Frostbite, blurred vision.
Skin contact : Frostbite.
Ingestion : No information on significant adverse effects.
Chronic Health Hazard : None.

4. First Aid Measures

General advice : None.
Eye contact : Flush eyes with plenty of water.
Skin contact : If frostbite occurs, immediately flush with plenty of lukewarm water (105-115°F; 41-46°C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.
Ingestion : If a large amount is swallowed, get medical attention.
Inhalation : If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.
Note to physicians : For inhalation, consider oxygen.

5. Fire-Fighting Measures

- Suitable extinguishing media : Regular dry chemical, carbon dioxide.
Large fires: Flood with fine water spray.
- Specific hazards : Severe fire hazard. Severe explosion hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Dust/air mixtures may ignite or explode. Electrostatic charges may be generated by flow or agitation resulting in ignition or explosion.
- Fire fighting : Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers from unmanned hose holder or monitor nozzle until well after the fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck: Stop leak if possible without personal risk. Let fire burn unless leak can be stopped immediately. For smaller tanks or cylinders, extinguish and isolate from other flammables. Evacuation radius: 800 meters (1/2 mile). Stop flow of gas.

6. Accidental Release Measures

- Occupational spill/release : Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Stop leak if possible without personal risk. Reduce vapors with water spray. Keep unnecessary people away. Isolate hazard area and deny entry. Remove sources of ignition. Ventilate closed spaces before entering.
- Additional advice : None.

7. Handling and Storage

Handling

Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.

Storage

Store in accordance with all current regulations and standards. Keep separated from incompatible substances. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Grounding and bonding required.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH, OSHA and NIOSH have not developed exposure limits for any of this product's components.

Engineering measures/Ventilation

Provide local exhaust or process enclosure ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of materials are present. Ensure compliance with applicable exposure limits.

Personal protective equipment

- Respiratory protection : Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

For unknown concentrations or immediately dangerous to life or death – Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

- Hand protection : Wear insulated gloves.
- Eye protection : For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
- Skin and body protection : For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.

9. Physical and Chemical Properties

- Form : Liquefied gas.
- Color : Colorless.
- Odor : Faint odor, sweet odor.
- Molecular weight : 42.08
- Vapor pressure : 3878.25 mmHg @ 21°C
- Vapor density : 1.45 (air = 1)
- Boiling point : -33°C
- Melting point : -128°C
- Water solubility : 37% @ 15°C
- Specific gravity : 0.720 @ -79°C (water = 1)
- Solvent solubility : Soluble: alcohol, ether, benzene, petroleum ether, fixed oils.

10. Stability and Reactivity

- Stability : Stable under normal conditions.
- Conditions to avoid : Avoid heat, flames, sparks or other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.
- Materials to avoid : Oxidizing materials.
- Hazardous decomposition products : Thermal decomposition products: oxides of carbon.

11. Toxicological Information

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, OSHA or DFG.

Target Organs

CYCLOPROPANE : Central nervous system
(75-19-4)

Additional Data

Interactions with drugs may occur. Stimulants such as epinephrine may induce ventricular fibrillation.

12. Ecological Information

No LOLI ecotoxicity data are available for this product's components.

13. Disposal Considerations

Waste from residues : Dispose in accordance with all applicable regulations.
/ unused products
Contaminated : Return cylinder to supplier.
packaging

14. Transport Information

DOT (US only)

Proper shipping : Cyclopropane
name
Class : 2.1
UN/ID No. : UN1027
Labeling : Flammable Gas

15. Regulatory Information

U.S. Federal Regulations

None of this product's components are listed under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

Acute: Yes
Chronic: No
Fire: Yes
Reactive: No
Pressure: Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
CYCLOPROPANE	75-19-4	No	Yes	No	Yes	Yes	Yes

Not regulated under California Proposition 65

16. Other Information

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