

# Material Safety Data Sheet



Cyclopropane

## Section 1. Chemical product and company identification

**Product name** : Cyclopropane  
**Supplier** : AIRGAS INC., on behalf of its subsidiaries  
259 North Radnor-Chester Road  
Suite 100  
Radnor, PA 19087-5283  
1-610-687-5253  
**Product use** : Synthetic/Analytical chemistry.  
**Synonym** :  
**MSDS #** : 001100  
**Date of Preparation/Revision** : \*\*\*,  
**In case of emergency** : 1-866-734-3438

## Section 2. Hazards identification

**Physical state** : Gas.  
**Emergency overview** :

Contact with rapidly expanding gases can cause frostbite.

**Routes of entry** :

**Potential acute health effects**

\*\*\* draft only \*\*\*  
**Eyes** : No known significant effects or critical hazards.  
**Skin** : No known significant effects or critical hazards.

**Inhalation** :  
**Ingestion** :

**Potential chronic health effects** : **CARCINOGENIC EFFECTS**: 3 (Not classifiable for humans.) by IARC.  
**MUTAGENIC EFFECTS**: Not available.  
**TERATOGENIC EFFECTS**: Not available.

**Medical conditions aggravated by over-exposure** :

See toxicological information (section 11)

## Section 3. Composition, Information on Ingredients

<u>Name</u>	<u>CAS number</u>	<u>% Volume</u>	<u>Exposure limits</u>
Cyclopropane	75-19-4	100	

## Section 4. First aid measures

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**Eye contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.  
**Skin contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.  
**Frostbite** : Try to warm up the frozen tissues and seek medical attention.

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- Inhalation** : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get 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.

## Section 5. Fire-fighting measures

- Flammability of the product** :
- Auto-ignition temperature** :
- Flash point** :
- Flammable limits** :
- Products of combustion** : Decomposition products may include the following materials: carbon oxides (CO, CO<sub>2</sub>).
- Fire hazards in the presence of various substances** :
- Fire-fighting media and instructions** :
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

- Personal precautions** :
- Environmental precautions** :

## Section 7. Handling and storage

- Handling** :
- Storage** :

## Section 8. Exposure controls/personal protection

- Engineering controls** :
- Personal protection**
- Eyes** : 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** : 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.
- Respiratory** : 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 based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- The applicable standards are (US) 29 CFR 1910.134 and (Canada) Z94.4-93
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Personal protection in case of a large spill** :

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**Consult local authorities for acceptable exposure limits.**

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### Section 9. Physical and chemical properties

Molecular weight	: 42.09 g/mole
Molecular formula	: C3-H6
Boiling/condensation point	:
Melting/freezing point	:
Critical temperature	:
Vapor density	:
Specific Volume (ft <sup>3</sup> /lb)	: 1.38889
Gas Density (lb/ft <sup>3</sup> )	:

### Section 10. Stability and reactivity

Stability and reactivity	: The product is stable.
Incompatibility with various substances	: Highly reactive with oxidizing agents.

### Section 11. Toxicological information

#### Toxicity data

Chronic effects on humans	: <b>CARCINOGENIC EFFECTS:</b> 3 (Not classifiable for humans.) by IARC. Causes damage to the following organs: central nervous system (CNS).
Other toxic effects on humans	: No specific information is available in our database regarding the other toxic effects of this material to humans.
Specific effects	
Carcinogenic effects	: May cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.
Mutagenic effects	: No known significant effects or critical hazards.
Reproduction toxicity	: No known significant effects or critical hazards.

### Section 12. Ecological information

#### Aquatic ecotoxicity


Not available.

Products of degradation	: Decomposition products may include the following materials: carbon oxides (CO, CO <sub>2</sub> ) and water.
Toxicity of the products of biodegradation	: The product itself and its products of degradation are not toxic.
Environmental fate	: Not available.
Toxicity to the environment	: Not available.

### Section 13. Disposal considerations

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, local regulation. Return cylinders with residual product to Airgas, Inc. Do not dispose of locally.

### Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1027	CYCLOPROPANE	2.1	Not applicable (gas).		<b>Limited quantity</b> Yes. <b>Packaging instruction</b> Passenger

**Cyclopropane**

						aircraft Quantity limitation: Forbidden.  <b>Cargo aircraft</b> Quantity limitation: 150 kg  <b>Special provisions</b> T50
<b>TDG Classification</b>	UN1027	CYCLOPROPANE	2.1	Not applicable (gas).		<b>Explosive Limit and Limited Quantity Index</b> 0.125  <b>ERAP Index</b> 3000  <b>Passenger Carrying Ship Index</b> Forbidden  <b>Passenger Carrying Road or Rail Index</b> Forbidden
<b>Mexico Classification</b>	UN1027	CYCLOPROPANE	2.1	Not applicable (gas).		-

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“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

**Section 15. Regulatory information**

**United States**

- U.S. Federal regulations** : TSCA 8(b) inventory: cyclopropane  
 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: cyclopropane  
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification:  
 cyclopropane: Fire hazard, Sudden release of pressure, Delayed (chronic) health hazard  
 Clean Water Act (CWA) 307: No products were found.  
 Clean Water Act (CWA) 311: No products were found.  
 Clean Air Act (CAA) 112 accidental release prevention: cyclopropane  
 Clean Air Act (CAA) 112 regulated flammable substances: cyclopropane  
 Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

- State regulations** : Pennsylvania RTK Hazardous Substances: cyclopropane: (generic environmental hazard)  
 Massachusetts Substances: cyclopropane  
 New Jersey: cyclopropane

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### Canada

**WHMIS (Canada)** : Class A: Compressed gas.  
Class B-1: Flammable gas.  
CEPA DSL: cyclopropane

## Section 16. Other information

### United States

**Label requirements** :

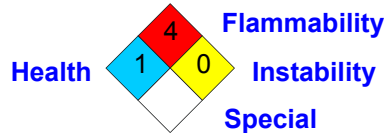
### Canada

**Label requirements** : Class A: Compressed gas.  
Class B-1: Flammable gas.

**Hazardous Material Information System (U.S.A.)** :

Health	
Flammability	
Physical hazards	

**National Fire Protection Association (U.S.A.)** :



\*\*\* draft only \*\*\*

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.