



Material Safety Data Sheet

1. Product and Company Identification

Product name : **Chloropentafluoroethane**

Chemical formula : C₂ClF₅

Synonyms : 1-Chloro-1,1,2,2,2-Pentafluoroethane; Ethane,1-Chloro-1,1,2,2,2-Pentafluoro-;
Ethane, Chloropentafluoro-; Chloroperfluoroethane; Ethane,Chloroperfluoro-;
Monochloropentafluoroethane; Ethane, Monochloropentafluoro-;
Pentafluorochloroethane; Ethane, Pentafluorochloro-; Pentafluoroethyl Chloride;
Perfluoroethyl Chloride; Fluorocarbon 115; Freon 115; Genetron 115;
Propellant 115; Refrigerant 115; UN 1020

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
Chloropentafluoroethane	76-15-3	100%

3. Hazards Identification

Emergency Overview

Containers may rupture or explode if exposed to heat.
May cause difficulty breathing.

Potential Health Effects

Inhalation : Dizziness, suffocation.
Eye contact : Frostbite, blurred vision.
Skin contact : Irritation, blisters.
Ingestion : Frostbite.
Chronic Health Hazard : Not available.

4. First Aid Measures

Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Skin contact : If frostbite or freezing occur, 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 blanket. 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: Use regular foam or flood with fine water spray.
- Specific hazards : Negligible fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Containers may rupture or explode if exposed to heat.
- 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. 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, evacuation radius: 800 meters (1/2 mile).

6. Accidental Release Measures

- Occupational spill/release : Stop leak if possible without personal risk. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.
- Additional advice : None.

7. Handling and Storage

Handling

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

Storage

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

8. Exposure Controls / Personal Protection

Exposure limits

- ACGIH : 1000 ppm TWA
- OSHA (vacated) : 1000 ppm TWA; 6320 mg/m³ TWA
- NIOSH : 1000 ppm TWA; 6320 mg/m³ TWA

Engineering measures/Ventilation

Ensure compliance with applicable exposure limits. Provide local exhaust ventilation system.

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 Health – 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	: Wear splash resistant safety goggles with a faceshield. 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	: Gas.
Color	: Colorless.
Odor	: Sweet odor.
Molecular weight	: 154.47
Vapor pressure	: 6035 mmHg @ 21°C
Vapor density	: 5.545 (air = 1)
Specific gravity	: 1.5678 @ -42°C
Boiling point	: -38°C
Melting point	: -106°C
Water solubility	: 0.006% @ 25°C
Solvent solubility	: Soluble: alcohol, ether, hydrocarbons, esters, chlorinated solvents, ketones, organic acids. Insoluble: glycols, glycerol, phenols.

10. Stability and Reactivity

Stability	: Stable under normal conditions.
Conditions to avoid	: Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.
Materials to avoid	: Metals, oxidizing materials.
Hazardous decomposition products	: Thermal decomposition products: Oxides of carbon, halogenated compounds.

11. Toxicological Information

The components of this material have been reviewed in various sources and the following endpoints are published:

CHLOROPENTAFLUOROETHANE : Inhalation LC50 Rat: 4880 g/m³/4H; Inhalation LC50 Rat: 800000 (76-15-3) ppm/4H

Acute Toxicity Level

CHLOROPENTAFLUOROETHANE : Non toxic: inhalation (76-15-3)

Component Carcinogenicity

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

Additional Data

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 : Chloropentafluoroethane
name
Class : 2.2
UN/ID No. : UN1020
Labeling : Nonflammable Gas

15. Regulatory Information

U.S. Federal Regulations

This material contains one or more of the following chemicals required under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

CHLOROPENTAFLUOROETHANE : SARA 313: 1.0% de minimis concentration
(76-15-3)

SARA 311/312

Acute: No
Chronic: No
Fire: No
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
CHLOROPENTAFLUOROETHANE	76-15-3	Yes	Yes	Yes	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.