



Material Safety Data Sheet

1. Product and Company Identification

Product name : **Chlorotrifluoromethane**

Chemical formula : C-CL-F3

Synonyms : Methane, Chlorotrifluoro-; Monochlorotrifluoromethane; Methane, Monochlorotrifluoro-; Trifluorochloromethane; Methane, Trifluorochloro-; Trifluoromethyl Chloride; Trifluoromonochlorocarbon; Acrtion 3; Freon 13; Frigen 13; Genetron 13; Refrigerant 13; R-13; UN 1022

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
Chlorotrifluoromethane	75-72-9	100%

3. Hazards Identification

Emergency Overview

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

Potential Health Effects

Inhalation : Nausea, vomiting, irregular heartbeat, symptoms of drunkenness, tingling sensation, suffocation, convulsion, coma.

Eye contact : Blurred vision, frostbite.

Skin contact : Frostbite.

Ingestion : Frostbite.

Chronic Health Hazard : Not applicable.

4. First Aid Measures

General advice : None.

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. Get immediate medical attention.

5. Fire-Fighting Measures

Suitable extinguishing media : Carbon dioxide, regular dry chemical.
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 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

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

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 ventilation system. 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.
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 : Wear splash resistant safety goggles. 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, but recommended. For the liquid: Wear appropriate protective, cold insulating clothing.

9. Physical and Chemical Properties

Form	: Gas.
Color	: Colorless.
Odor	: Sweet odor.
Molecular weight	: 104.46
Vapor pressure	: 24480 mmHg @ 21°C
Vapor density	: 3.61 @ 20°C (air = 1)
Specific gravity	: 1.49 @ 100°C (water = 1)
Boiling point	: -114°F (-81°C)
Melting point	: -294°F (-181°C)
Water solubility	: 0.009% @ 25°C
Solvent solubility	: Insoluble: Oils

10. Stability and Reactivity

Stability	: Stable at normal temperatures and pressure.
Conditions to avoid	: Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.
Materials to avoid	: Metals.
Hazardous decomposition products	: Thermal decomposition products: Halogenated compounds, 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.

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

14. Transport Information

DOT (US only)

Proper shipping name	: Chlorotrifluoromethane
Class	: 2.2
UN/ID No.	: UN1022

Labeling : Non-Flammable Gas

15. Regulatory Information

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified 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.

CHLOROTRIFLUOROMETHANE : SARA 313: 1.0% de minimis concentration
(75-72-9)

SARA 311/312

Acute: Yes
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
CHLOROTRIFLUOROMETHANE	75-72-9	No	No	No	Yes	No	No

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.