



# MATERIAL SAFETY DATA SHEET

320-148

---

---

## Section 1: Product & Company Identification

---

---

**Product Name:** Freeze Spray  
**Product Number (s):** 74086  
**Product Use:** dissipate heat and cool circuits

### Manufacturer / Supplier Contact Information:

#### In United States:

CRC Industries, Inc.  
885 Louis Drive  
Warminster, PA 18974  
[www.crcindustries.com](http://www.crcindustries.com)  
1-215-674-4300 (General)  
(800) 521-3168 (Technical)  
(800) 272-4620 (Customer Service)

#### In Canada:

CRC Canada Co.  
2-1246 Lorimar Drive  
Mississauga, Ontario L5S 1R2  
[www.crc-canada.ca](http://www.crc-canada.ca)  
1-905-670-2291

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

---

---

## Section 2: Hazards Identification

---

---

### Emergency Overview

**CAUTION:** Contents Under Pressure.

**Appearance & Odor:** Expelled product is a clear gas with a faint ethereal odor. Pressurized product is a liquefied gas.

### Potential Health Effects:

#### ACUTE EFFECTS:

**EYE:** Contact with dispersed gas is not expected to cause negative effects. Contact with direct spray can cause severe irritation, redness, tearing, blurred vision, and possible freeze burns.

**SKIN:** Contact with dispersed gas is not expected to cause negative effects. Contact with direct spray can cause frostbite, irritation and dermatitis.

**INHALATION:** Inhalation of dispersed gas is not expected to cause negative effects. Inhalation of concentrated vapor may product anesthetic effects and feeling of euphoria. Prolonged exposure can cause rapid breathing, headache, dizziness, narcosis, and unconsciousness. Deliberately inhaling this product can lead to death from asphyxiation depending on concentration and time of exposure.

**INGESTION:** Ingestion of liquid product may cause frostbite to mouth and throat. Liquid product may pose aspiration hazard.

**CHRONIC EFFECTS:** Unknown

**TARGET ORGANS:** None known

**Medical Conditions Aggravated by Exposure:** None known

See Section 11 for toxicology and carcinogenicity information on product ingredients.

---

---

**Section 3: Composition/Information on Ingredients**

---

---

COMPONENT	CAS NUMBER	% by Wt.
1,1,1,2-Tetrafluoroethane (HFC-134a)	811-97-2	100

---

---

**Section 4: First Aid Measures**

---

---

- Eye Contact:** For liquid contact or direct spray effects, immediately flush with plenty of water for 15 minutes. Call a physician if frostbite occurs.
- Skin Contact:** For liquid contact or direct spray effects, warm area gradually and get medical attention if there is evidence of tissue damage. Flush area with plenty of water. Treat as frostbite.
- Inhalation:** Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician immediately.
- Ingestion:** Do not induce vomiting. Contact a physician immediately.
- Note to Physicians:* Treat symptomatically.

---

---

**Section 5: Fire-Fighting Measures**

---

---

**Flammable Properties:** This product is non-flammable in accordance with aerosol flammability definitions.

Flash Point: None (COC)  
Autoignition Temperature: ND

Upper Explosive Limit: NA  
Lower Explosive Limit: NA

**Fire and Explosion Data:**

- Suitable Extinguishing Media:** As appropriate for combustibles in area.
- Products of Combustion:** Oxides of carbon, halogen acids (thermal decomposition)
- Explosion Hazards:** Aerosol containers, when exposed to heat from fire, may build pressure and explode.
- Protection of Fire-Fighters:** Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Stop the release of the material if possible. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

---

---

**Section 6: Accidental Release Measures**

---

---

- Personal Precautions:** Use personal protection recommended in Section 8.
- Environmental Precautions:** Ventilate area to disperse the vapor plume.
- Methods for Containment & Clean-up:** Eliminate sources of ignition. Ventilate the area with plenty of fresh air, especially low areas where vapors may accumulate. If in confined space or if a large plume has been emitted, workers should wear appropriate respiratory protection.

**Section 7: Handling and Storage**

**Handling Procedures:** Avoid breathing vapors. Vapors are heavier than air and may travel along the ground. High vapor concentrations may lead to asphyxiation. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

**Storage Procedures:** Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F / 49°C to prevent cans from rupturing. Keep out of reach of children.

**Aerosol Storage Level:** I

**Section 8: Exposure Controls/Personal Protection**

**Exposure Guidelines:**

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
1,1,1,2-Tetrafluoroethane (HFC-134a)	NE	NE	NE	NE	1000	AIHA	ppm
N.E. – Not Established      (c) – ceiling      (s) – skin      (v) – vacated							

**Controls and Protection:**

**Engineering Controls:** Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

**Respiratory Protection:** None required for normal work where adequate ventilation is provided. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

**Eye/face Protection:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**Skin Protection:** Use protective gloves such as insulated rubber. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

**Section 9: Physical and Chemical Properties**

**Physical State:** dispensed product is a gas; pressurized product is a liquefied gas

**Color:** colorless

**Odor:** ethereal

**Odor Threshold:** ND

**Specific Gravity:** 1.24

**Initial Boiling Point:** -15.5°F

**Freezing Point:** ND

**Vapor Pressure:** 70 psig @ 70°F

**Vapor Density:** 3.5 (air = 1)

**Evaporation Rate:** very fast

**Solubility:** 0.95% (in water) @ 70°F

**Coefficient of water/oil distribution:** ND

pH: NA

Volatile Organic Compounds: wt %: 0 (exempt) g/L: 0 lbs./gal: 0**Section 10: Stability and Reactivity**

Stability: Stable

Conditions to Avoid: High heat, open flame

Incompatible Materials: Alkali or alkaline earth metals (such as NA, K, or Ba); finely divided metals; magnesium and alloys containing more than 2% magnesium

Hazardous Decomposition Products: Halogen acids

Possibility of Hazardous Reactions: No

**Section 11: Toxicological Information**

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

**Acute Toxicity:**

<u>Component</u>	<u>Oral LD50 (rat)</u>	<u>Dermal LD50 (rabbit)</u>	<u>Inhalation LC50 (rat)</u>
1,1,1,2-Tetrafluoroethane	No data	No data	1500 g/m <sup>3</sup> /4H

**Chronic Toxicity:**

<u>Component</u>	<u>OSHA Carcinogen</u>	<u>IARC Carcinogen</u>	<u>NTP Carcinogen</u>	<u>Irritant</u>	<u>Sensitizer</u>
1,1,1,2-Tetrafluoroethane	No	No	No	No	Unknown

Reproductive Toxicity: No information availableTeratogenicity: No information availableMutagenicity: No information availableSynergistic Effects: No information available**Section 12: Ecological Information**

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available  
 Persistence / Degradability: No information available  
 Bioaccumulation / Accumulation: No information available  
 Mobility in Environment: No information available

**Section 13: Disposal Considerations****Waste Classification:** Dispensed product is not a hazardous waste. Empty aerosol containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

---

---

**Section 14: Transport Information**

---

---

US DOT (ground): Consumer Commodity, ORM-D

ICAO/IATA (air): Consumer Commodity, ID8000,9

IMO/IMDG (water): UN1950, Aerosols, 2.2, Limited Quantity

Special Provisions: DOT-SP 11644: In accordance with this special permit, the product container is marked with DOT-SP11644 instead of 2Q. This packaging is approved for shipping as a Consumer Commodity.

---

---

**Section 15: Regulatory Information**

---

---

**U.S. Federal Regulations:**

**Toxic Substances Control Act (TSCA):**

All ingredients are either listed on the TSCA inventory or are exempt.

**Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):**

Reportable Quantities (RQ's) exist for the following ingredients: None

**Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.**

**Superfund Amendments Reauthorization Act (SARA) Title III:**

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:

Fire Hazard	No
Reactive Hazard	No
Release of Pressure	Yes
Acute Health Hazard	Yes
Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:  
None

**Clean Air Act:**

Section 112 Hazardous Air Pollutants (HAPs): None

**Canadian Regulations:**

**Controlled Products Regulations:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: A, D2B

**Canadian DSL Inventory:** All ingredients are either listed on the DSL Inventory or are exempt.

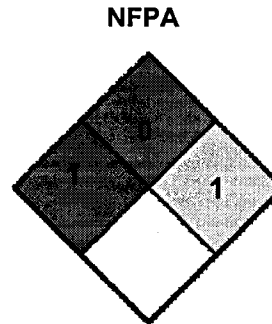
**European Union Regulations:**

**RoHS Compliance:** This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

**Additional Regulatory Information:** None

**Section 16: Other Information**

<b>HMIS® (II)</b>	
<b>Health:</b>	<b>1</b>
<b>Flammability:</b>	<b>0</b>
<b>Reactivity:</b>	<b>1</b>
<b>PPE:</b>	<b>B</b>



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick  
 CRC #: 282  
 Revision Date: 04/08/2015

Changes since last revision: Section 14: IMO/IMDG

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists  
 CAS: Chemical Abstract Service  
 CFR: Code of Federal Regulations  
 DOT: Department of Transportation  
 DSL: Domestic Substance List  
 g/L: grams per Liter  
 HMIS: Hazardous Materials Identification System  
 IARC: International Agency for Research on Cancer  
 IATA: International Air Transport Association  
 ICAO: International Civil Aviation Organization  
 IMDG: International Maritime Dangerous Goods  
 IMO: International Maritime Organization  
 lbs./gal: pounds per gallon  
 LC: Lethal Concentration  
 LD: Lethal Dose

NA: Not Applicable  
 ND: Not Determined  
 NIOSH: National Institute of Occupational Safety & Health  
 NFPA: National Fire Protection Association  
 NTP: National Toxicology Program  
 OSHA: Occupational Safety and Health Administration  
 PMCC: Pensky-Martens Closed Cup  
 PPE: Personal Protection Equipment  
 ppm: Parts per Million  
 RoHS: Restriction of Hazardous Substances  
 STEL: Short Term Exposure Limit  
 TCC: Tag Closed Cup  
 TWA: Time Weighted Average  
 WHMIS: Workplace Hazardous Materials Information System