



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Freeze Spray - 283 g

**Other means of identification**

**Product Code** No. 74086 (Item# 1006227)

**Recommended use** Dissipates heat and cool circuits

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufactured or sold by:**

**Company name** CRC Canada Co.

**Address** 83 Galaxy Blvd  
Unit 35 - 37  
Toronto, ON M9W 5X6  
Canada

**Telephone**

**General Information** 416-847-7750

**24-Hour Emergency (CHEMTREC)** 800-424-9300 (Canada)

**Website** www.crc-canada.ca

**E-mail** Support.CA@crcindustries.com

## 2. Hazard identification

**Physical hazards** Gases under pressure Liquefied gas

**Health hazards** Not classified.

**Environmental hazards** Not classified.

### Label elements



**Signal word** Warning

**Hazard statement** Contains gas under pressure; may explode if heated.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Protect from sunlight. Store in a well-ventilated place.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Supplemental information** When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.

**Other hazards** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
1,1,1,2-tetrafluoroethane	HFC-134A	811-97-2	100

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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## 4. First-aid measures

<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT give epinephrine (adrenaline). Get medical attention if symptoms persist.
<b>Skin contact</b>	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.
<b>Eye contact</b>	For liquid contact or direct spray effects, immediately flush with plenty of water for 15 minutes. Call a physician if frostbite occurs.
<b>Ingestion</b>	Do not induce vomiting. Call a physician immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Pressurized container may rupture when exposed to heat or flame. During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Wear suitable protective equipment.
<b>Fire fighting equipment/instructions</b>	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
<b>General fire hazards</b>	Contents under pressure. Pressurized container may rupture when exposed to heat or flame. No unusual fire or explosion hazards noted.

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## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Ventilate the area. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so.

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## 7. Handling and storage

<b>Precautions for safe handling</b>	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. 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. Avoid contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Use care in handling/storage. For product usage instructions, see the product label.
<b>Conditions for safe storage, including any incompatibilities</b>	Level 1 Aerosol.  Contents under pressure. Do not puncture, incinerate or crush. Do not expose to heat or store at temperatures above 120 °F/49 °C as can may burst. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Use care in handling/storage. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation.

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## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves such as: Neoprene.
<b>Other</b>	Wear suitable protective clothing. Wear protective gloves.
<b>Respiratory protection</b>	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash contaminated clothing before reuse.

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## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol.
<b>Color</b>	Colorless.
<b>Odor</b>	Ethereal.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-149.8 °F (-101 °C)
<b>Initial boiling point and boiling range</b>	-15.5 °F (-26.4 °C)
<b>Flash point</b>	None (Tag Closed Cup)
<b>Evaporation rate</b>	Very fast.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	6652.8 hPa estimated
<b>Vapor density</b>	3.5 (air = 1)
<b>Relative density</b>	1.24
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.95 %
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	> 1369.4 °F (> 743 °C)
<b>Decomposition temperature</b>	694.4 °F (368 °C)
<b>Viscosity</b>	Not available.

## Other information

Partition coefficient (oil/water)	1.68
Percent volatile	100 % estimated

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## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.
Incompatible materials	Strong oxidizing agents. Alkali metals. Alkaline earth metals. Powdered metal. Aluminum. Magnesium. Zinc.
Hazardous decomposition products	Hydrogen fluoride. Carbonyl fluoride. Carbon oxides.

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## 11. Toxicological information

### Information on likely routes of exposure

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.
Skin contact	Contact with dispersed gas is not expected to cause negative effects. Contact with direct spray can cause frostbite, irritation and dermatitis.
Eye contact	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.
Ingestion	Ingestion of liquid product may cause frostbite to mouth and throat. Liquid product may pose aspiration hazard.

### Symptoms related to the physical, chemical and toxicological characteristics

Contact with dispersed gas is not expected to cause negative effects.

### Information on toxicological effects

Acute toxicity	Not classified.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation. Contact with direct spray can cause frostbite, irritation and dermatitis.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation. Contact with direct spray can cause severe irritation, redness, tearing, blurred vision, and possible freeze burns.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Liquid product may pose aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

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## 12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

1,1,1,2-tetrafluoroethane 1.68

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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### 13. Disposal considerations

**Disposal instructions** Contents under pressure. Empty container can be recycled. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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### 14. Transport information

**TDG**

**UN number** UN1950

**UN proper shipping name** AEROSOLS, non-flammable, Limited Quantity

**Transport hazard class(es)**

**Class** 2.2

**Subsidiary risk** -

**Packing group** -

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IATA**

**UN number** UN1950

**UN proper shipping name** Aerosols, non-flammable, Limited Quantity

**Transport hazard class(es)**

**Class** 2.2

**Subsidiary risk** -

**Packing group** -

**ERG Code** 2L

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**UN number** UN1950

**UN proper shipping name** AEROSOLS, Limited Quantity

**Transport hazard class(es)**

**Class** 2.2

**Subsidiary risk** -

**Packing group** -

**Environmental hazards**

**Marine pollutant** No.

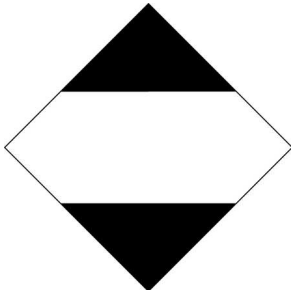
**EmS** F-D, S-U

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

IATA



IMDG; TDG



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## 15. Regulatory information

### Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

**Canada. Excluded VOCs. Guidelines for Volatile Organic Compounds in Consumer Products. CEPA 1999. Environment Canada, as amended**

1,1,1,2-tetrafluoroethane (CAS 811-97-2)

**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

1,1,1,2-tetrafluoroethane (CAS 811-97-2)

**Precursor Control Regulations**

Not regulated.

### International regulations

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

1,1,1,2-tetrafluoroethane (CAS 811-97-2)

Listed.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

### International Inventories

**Country(s) or region**

**Inventory name**

**On inventory (yes/no)\***

Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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## 16. Other information

<b>Issue date</b>	08-20-2019
<b>Revision date</b>	03-01-2022
<b>Version #</b>	03
<b>Further information</b>	CRC # 282/1002335
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<b>Revision information</b>	Physical & Chemical Properties: Multiple Properties