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Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Endo Refrigerant Spray

Recommended use of the chemical and restrictions on use

Product code #100-5970

Product Type Non-flammable aerosol
Synonyms None

Supplier's details

Recommended Use Pulp Vitality Spray.
Uses advised against No information available

Manufacturer

Cargus International, Inc.
135 North Route 9W
Congers, New York, 10920
845-267-2600

Emergency telephone number

Chemical Emergency Phone Number Chemtrec 1-800-262-8200 ID 1195

Company Emergency Phone Number 845-267-2600

2. HAZARDS IDENTIFICATION

Classification

Gases under pressure	Compressed Gas
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GHS Label elements, including precautionary statements

Emergency Overview

WARNING

Hazard Statements

Contains gas under pressure; may explode if heated



Appearance opaque	Physical state Aerosol	Odor Peppermint Scent
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Precautionary Statements - Storage

Protect from sunlight. Store in a well-ventilated place

Hazards not otherwise classified (HNOC)

None

Other information

1.7E-06% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
1,1,1,2-TETRAFLUORETHANE	811-97-2	90-100

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Avoid contact with eyes, skin, and clothing. Avoid breathing, vapors, mist, or gas.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.

Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed

Main Symptoms Not applicable.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Specific hazards arising from the chemical

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge none.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products None known based on information supplied.

Aerosol Level 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,1,1,2-TETRAFLUORETHANE 811-97-2	TWA: 1000 ppm 8 hours.	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

Exposure controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Chemical resistant apron. Protective gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Aerosol	Odor	Peppermint Scent
Appearance	opaque	Odor Threshold	
Color			

<u>Property</u>	<u>Values</u>
pH	No information available
Melting/freezing point	No information available
Boiling point/boiling range	No information available
Flash Point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limits in Air	
upper flammability limit	No information available
lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.25
Water solubility	Practically insoluble
Partition coefficient: n-octanol/water	

Autoignition temperature No information available
Decomposition temperature
Viscosity No information available
Explosive properties

Other information

VOC Content(%) 0.06

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides. Fumes. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Avoid breathing vapors or mists.
Eye contact Avoid contact with eyes and skin.
Skin contact Avoid contact with skin.
Ingestion Do not taste or swallow.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,1,1,2-TETRAFLUORETHANE 811-97-2	-	-	= 1500 g/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms None under normal use.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization None known.
Germ Cell Mutagenicity None known.
Carcinogenicity There are no known carcinogenic chemicals in this product.
Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure) None under normal use conditions.
Specific target organ systemic toxicity (repeated exposure) None under normal use conditions.

Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact may defat the skin and produce dermatitis.

Aspiration hazard Not applicable.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 1.7E-06% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability

Bioaccumulation

Chemical Name	log Pow
1,1,1,2-TETRAFLUORETHANE 811-97-2	1.06

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA UN1950, AEROSOLS, 2.2,LTD. QTY.

IMDG UN1950, AEROSOLS, 2.2,LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
1,1,1,2-TETRAFLUOR ETHANE	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 CHINA - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any known Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

EPA Pesticide Registration Number Not applicable

Canada

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

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 0	Instability 0	Physical and chemical hazards - Personal protection N/A
<u>HMIS</u>	Health Hazard 1	Flammability 0	Physical Hazard 0	

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Revision Note	

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet