WEITRON

Safety Data Sheet Information

Section 1. CHEMICAL PRODUCT SECTION

Product Name: R-134a Refrigerant
Date Prepared: 03-2025

Manufacturer: Weitron, Inc.
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Section 2. HAZARDS IDENTIFICATION

PRODUCT HAZARD CATEGORY: Gases under pressure. Liquefied Gas
LABEL CONTENT: **Pictogram**

SIGNAL WORD: **WARNING**
HAZARDOUS WARNINGS: Contains gas under pressure; may explode if heated.
HAZARDOUS PREVENTION MEASURES: Protect from sunlight. Store in a well-ventilated place.
OTHER HAZARDS: Misuse or intentional inhalation abuse may lead to death without warning. Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing. Rapid evaporation of the liquid may cause frostbite.
Weitron branded products that are considered and labeled “Consumer Commodities” are exempt from GHS labeling guidelines when used in the workplace in the same way and the same frequency of use as a consumer would use the product.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Description	%
811-97-2	1,1,1,2-Tetrafluoroethane	100 %

This product contains no known hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Emergency Overview

Contents under pressure. “Frostbite-like” effects may occur if the liquid or escaping vapors contact the eyes or skin. Inhalation overexposure may cause: Central nervous system depression with dizziness, confusion, loss of coordination, drowsiness, unconsciousness or death. Suffocation if air is displaced by vapors.

Potential Health Effects

Eyes	:	“Frostbite-like” effects may occur if the liquid or escaping vapors contact the eyes.
Skin	:	“Frostbite-like” effects may occur if the liquid or escaping vapors contact the skin.
Inhalation	:	Inhalation overexposure may cause: Central nervous system depression with dizziness, confusion, loss of coordination, drowsiness, unconsciousness or death. Suffocation, if air is displaced by vapors.
Ingestion	:	Nausea and diarrhea are possible.
Carcinogenicity	:	No known cancer hazards.

HMIS Classification

Health	:	1
Flammability	:	1
Reactivity	:	0

Section 4. FIRST AID MEASURES

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact

Wash affected area immediately with large amounts of soap or water for 15 minutes. Remove contaminated clothing and shoes, and wash before reusing. Treat affected area for frostbite if necessary by gently warming. May irritate skin. If irritation continues contact Physician.

Inhalation

If inhaled, immediately remove to area with fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. Contact Physician.

Ingestion

Is not considered a potential route of exposure.

Advice to Physician

Because of the possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should be used with caution and only in situations of emergency life support.

Section 5. FIRE FIGHTING MEASURES

Flash Point

Does not flash

Flammable limits in Air

LEL: None
UEL: None
Based on ASHRAE Standard 34 with match ignition

Autoignition Temperature

>750°C

Extinguishing Media

Water, carbon dioxide, foam or dry powder

Fire & Explosion Hazards

Not flammable at ambient temperatures and atmospheric pressure. Material will become combustible when mixed with air under pressure and exposed to ignition sources. Hazardous thermal decomposition products (Halogenated Compounds, Hydrogen Fluoride, Carbonyl Halides, Carbon Oxides).

Fire Fighting Instructions

Contents under pressure and container may rupture when exposed to high temperature. Product may act as asphyxiate. As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear. Contain runoff water. Contaminated extinguishing water must be disposed of in accordance with applicable regulations. Avoid breathing smoke, fumes, and decomposition products.

Section 6. ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

Evacuate personnel to safe areas. Ventilate area. Wear appropriate personal protective equipment.

Initial Containment

Contain spilled material. Do not allow material to enter soil or surface water. Product evaporates.

Spill Procedures

Contain spilled material. Large spillage should be dammed-off and pumped into containers.

Section 7. HANDLING AND STORAGE

Handling (Personnel)

Do not breathe vapors. Do not get in eyes, on skin or clothing. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Use appropriate personal protective equipment when using material. Do not puncture or drop cans. Do not expose cans to high heat or open flame.

Handling (Physical Aspects)

Avoid contact with strong oxidizing agents. Avoid contact with eyes and skin. Keep away from children.

Storage Precautions

Protect containers from physical damage. Do not Puncture, incinerate or store cans above 120ºF. Keep in cool dry area out of direct sunlight.

Section 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient under normal use conditions.

Eye/Face Protective Requirements

Wear safety glasses, splash goggles or face shield. Where contact with this material is likely, eye protection is recommended.

Skin Protection

Wear protective gloves to minimize skin contamination. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.

Respiratory Protection

Under normal use conditions, with adequate ventilation, no special handling equipment is required.

Miscellaneous

Use good personal hygiene practices; limit exposure to product whenever possible to minimize clean-up.

Exposure Guidelines

Exposure Limit Values:

1,1,1,2-Tetrafluoroethane	AEL	1,000 ppm	8 & 12 hr. TWA

AEL is the Acceptable Exposure Limit determined by Dupont

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquefied gas
Color	:	Colorless

Odor	:	Weak
pH	:	Note: neutral
Melting point/ range	:	-101 °C
Boiling point/boiling range	:	-26.2 °C
Flash point	:	Note: Not applicable
Evaporation rate	:	> 1 Method: Compared to CCl4.
Lower explosion limit	:	Note: None
Upper explosion limit	:	Note: None
Vapor pressure	:	5,915 hPa at 21.1 °C (70.0 °F) 14,713 hPa at 54.4 °C (129.9 °F)
Vapor density	:	3.5
Density	:	1.2 g/cm3
Water solubility	:	1.5 g/l
Partition coefficient n-octanol/water	:	log Pow: 1.06 Note: The product is more soluble in octanol.

Flash point & additional flammability data found in section 5.

Section 10. STABILITY AND REACTIVITY

Stability

This compound is stable at ambient conditions.

Polymerization

Hazardous polymerization will not occur Conditions to avoid
Do not mix with air above atmospheric pressure or oxygen. Do not puncture, incinerate or store cans above 120ºF. Keep in cool dry area out of direct sunlight.

Incompatibility with other materials

Avoid contact with strong oxidizing agents. Incompatible with alkali or alkaline earth metals – powdered aluminum, Zink, etc.

Hazardous decomposition products

Halogenated compounds
Hydrogen fluoride
Carbonyl halides
Carbon oxides

Section 11. TOXICOLOGY INFORMATION

Acute inhalation toxicity	:	LC50: > 500000 ppm Exposure time: 4 h Species: Rat

Sensitization	:	Cardiac sensitization Species: dogs Note: No-observed-effect level 50 000 ppm Lowest observed effect level 75 000 ppm
Repeated dose toxicity	:	Species: Rat NOEL: 40000 ppm
Genotoxicity in vitro	:	Test Method: Ames test Result: negative Method: OECD Test Guideline 471
Genotoxicity in vivo	:	Species: Mouse Result: negative
Reproductive toxicity	:	Species: Mouse Application Route: Inhalation NOEL: 50,000 ppm
Teratogenicity	:	Species: Rabbit Application Route: Inhalation NOEL: 40,000 ppm Method: OECD Test Guideline 414
Further information	:	Note: Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing. Rapid evaporation of the liquid may cause frostbite. Avoid skin contact with leaking liquid (danger of frostbite).

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to bacteria	:	Growth inhibition EC10: > 730 mg/l Exposure time: 6 h Species: Pseudomonas putida

Elimination information (persistence and degradability)

Biodegradability	:	Result: Not rapidly biodegradable Value: 3 % Method: OECD 301 D

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment: Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

Additional ecological information	:	Accumulation in aquatic organisms is unlikely. This product contains greenhouse gases which may contribute to global warming. Do NOT vent to the atmosphere. To comply with provisions of the U.S. Clean Air Act, any residual must be recovered.

Section 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Observe all Federal, State, and Local Environmental regulations.

Environmental Hazards

Empty Pressure Vessels should be returned to the supplier.

Note

This product is subject to U.S. Environmental Protection Agency Clean Air Act Regulations Section 608 in 40 CFR Part 82 regarding refrigerant recycling.

Section 14. TRANSPORTATION INFORMATION

US DOT Information

Shipping Name: 1,1,1,2-Tetrafluoroethane
Product Label: 1,1,1,2 Tetrafluoroethane
Shipping Class: 2.2
UN/NA #: 3159

ICAO/IATA

Shipping Name: 1,1,1,2-tetrafluoroethane
Shipping Class: 2.2
UN/NA#: UN3159
Exceptions: Can qualify for limited quantity under special provisions
Other information: Non-flammable

IMDG

Shipping Name: 1,1,1,2-Tetrafluoroethane
Shipping Class: 2.2
UN/NA#: UN3159
Exceptions: Can qualify for limited quantity under special provisions
Other information: Non-flammable
Other Transportation Information:
The Transport information may vary with the container and mode of shipment.

Section 15. REGULATORY INFORMATION

Miscellaneous Information

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).
This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS).
This material or all of its components are listed on the Canadian Domestic Substances List (DSL).

National regulatory information

SARA 302 Components	:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	:	Acute Health Hazard Sudden Release of Pressure Hazard
California Prop. 65	:	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. **However, neither Weitron Inc. nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.** Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.