

# SAFETY DATA SHEET

Section 1. CHEMICAL PRODUCT SECTION

Product Name: R134a Refrigerant

Date Prepared: 03-Jan-2022

Manufacturer: Weitron, Inc.

801 Pencader Dr.

Newark, DE 19702 USA PH: (800)-398-3816

PH: (302)-455-6655 Fax: (302)-455-6656

#### Section 2. HAZARDS IDENTIFICATION

PRODUCT HAZARD CATEGORY: Gases under pressure. Liquefied Gas

**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 0 Reactivity 1

## 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 (Carbon oxides, Hydrogen Fluoride, Carbonyl fluoride)

# 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 120°F. 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:

Boiling Point:

-26.1°C (-15.0°F)

Solubility in Water:

Vapor Pressure: Vapor

Gravity:

Specific Gravity:

Liquid Density:

Slight ethereal odor

-26.1°C (-15.0°F)

1.5g/L at 77°F (25°C)

85.8 psia @ 70°F

Not Determined

1.208 at 77°F (25°C)

1.206 g/cm³ @ 25°C

PH: <7

Volatile Organic Compounds (VOC) Not Determined

# 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 120°F. 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.

# Decomposition

Avoid high temperatures or open flames which can decompose material forming hydrofluoric acid and possibly carbonyl fluoride.

#### Section 11. TOXICOLOGY INFORMATION

Dermal : not applicable
Oral : not applicable
Inhalation 4 h LC50 : 567000ppm, rat
Inhalation LOAEC : 75000ppm, dog

Skin Irritation : slight irritation, rabbit

Not expected to cause skin irritation based on expert review of

properties of the substance No skin irritation, human

Eye Irritation Skin : slight irritation, rabbit

Sensitization Not expected to cause skin irritation based on expert review of

properties of the substance No skin irritation, human

: Did not cause sensitization on laboratory animals, guinea pig Not expected to cause sensitization based on expert review of

the properties of the substance

Did not cause sensitization on humans

Repeated dose toxicity: Inhalation

Rat

No toxicologically significant effects were found

Carcinogenicity : Overall weight of evidence indicates that the substance is not

carcinogenic

An increased incidence of benign tumors was observed in

laboratory animals

Mutagenicity : Did no cause genetic damage in animals

Did not cause genetic damage in cultured mammalian cells Did not cause genetic damage in cultured bacterial cells

Reproductive toxicity

Teratogenicity

: Animal testing showed no reproductive toxicity

: Animal testing showed effects on embryo-fetal development at level

equal to or above those cause maternal toxicity: Cardiac sensitization

Further information threshold limit: 312975 mg/m<sup>3</sup>

# Section 12. ECOLOGICAL INFORMATION Agua Toxicity

riqua romenty		
	96 h LC50 mg/L	: Oncohynchus mykiss (rainbow trout) 450
	72 h EC50	: Algae >118 mg/L
	48 h EC50	Information based on data obtained from similar substances
Waste	Disposal	: Daphnia magna (water flea) 980 mg/L

#### Section 13. DISPOSAL CONSIDERATIONS

Can be used after re-conditioning. Recover by distillation or remove to a permitted waste disposal facility. Comply with Federal, State, and local regulations

**Environmental Hazards** 

Empty Pressure Vessels should be returned to the supplier

## 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)

## **Section 16**

## **OTHER INFORMATION**

To the best of our knowledge, the information contained herein is accurate. However, neither FJC 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.