

MSDS Information

Section 1. CHEMICAL PRODUCT SECTION

Product Name: R134a Refrigerant with Extreme Cold
Product: Part #685
Date Prepared: 01-2012

Manufacturer: FJC

P. O. Box 499
101 Commercial Drive
Mooresville, NC 28115
PH: 704-664-3587
FAX: 704-664-5522

For Chemical Emergency
Call INFOTRAC – 24 Hour Number
1-800-535-5053
Outside of United States
Call 24 Hour Number
1-352-323-3500

Section 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	CHEMICAL FAMILY	Weight %
811-97-2	Description 1,1,1,2-Tetrafluoroethane	80 - 90 %
ND	Proprietary	10 - 20 %

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

Section 3. HAZARD IDENTIFICATION

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

NFPA Classification:

Health:	2
Flammability	1
Instability	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:

Contact a physician. May cause irritation. Do not induce vomiting.

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:

>204°C

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.

Fire Fighting Instructions:

Contents under pressure and container may rupture when exposed to high temperature. Product may act as asphyxiant. 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)

Wear appropriate personal protective equipment

Initial Containment

Contain spilled material. Do not allow material to enter soil or surface water. Absorb spills with inert material. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

Spill Procedures

Contain spilled material. Large spillage should be dammed-off and pumped into containers. Take up the remainder by absorbent material. Prevent spilled product from entering streams or drinking water supply. Avoid disposal into waste water treatment facilities. Floor may become slippery. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

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.

Section 9.**PHYSICAL AND CHEMICAL PROPERTIES**

Form:	Liquid Vapor Gas
Color:	Amber
Odor:	Ethereal odor
Boiling Point:	-15.7°F (-26.5°C)
Solubility in Water:	Soluble
Vapor Pressure:	85.8 psia @ 70°F
Vapor Gravity:	Not Determined
Specific Gravity:	Not Determined
Bulk Density :	Not Determined
PH:	N/A
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**

Not Determined

Section 12.**ECOLOGICAL INFORMATION**

Miscellaneous:

No Information available

Section 13.**DISPOSAL CONSIDERATIONS**

Waste Disposal

Unclean empty containers should be disposed of in the same manner as the contents. Due to the highly concentrated color, avoid washing material into sewer systems without proper treatment and authorization by the treatment facility management. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

Section 14.**TRANSPORTATION INFORMATION**

US DOT Information:

Shipping Name:	Consumer Commodity
Product Label:	1,1,1,2-tetrafluoroethane (R134a Refrigerant Gas)
DOT Hazard Class:	ORM-D
UN/NA #:	NA

ICAO/IATA

Shipping Name:	1,1,1,2-tetrafluoroethane (R134a Refrigerant Gas)
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 (R134a Refrigerant Gas)
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 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.
