FJC
Air Conditioning Products
Tools, Equipment & Refrigerant

SAFETY DATA SHEET

Issue Date 01-Jan-2009 **Revision Date** 03-Jan-2019 **Version** 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : FJC R134A STOP LEAK

Product code : 9140

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Oil Charge

1.3. Details of the supplier of the safety data sheet

Supplier Address
FJC
101 Commercial Drive
Mooresville, NC 28115

1.4. Emergency telephone number

Emergency number : INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Liquefied gas H280 Repr. 1B H360

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling :

Hazard pictograms (GHS-US)

GHS04 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H280 - Contains gas under pressure; may explode if heated H360
- May damage fertility or the unborn child

Precautionary statements (GHS-US) : P201 - Obtain special instructions
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves,protective clothing,eye protection,face protection
P308+P313 - If exposed or concerned: Get medical advice/attention P405 - Store locked up
P410+P403 - Protect from sunlight. Store in a well-ventilated place
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the classification: Contains gas under pressure; may explode if heated. Intentional misuse and inhalation abuse may cause cardiac or central nervous systems effects. Warning. May Cause frostbite in contact with skin. May Cause frostbite in contact with skin. (Liquid form can be ejected if the aerosol can is not held upright during use.) Warning.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
1,1,1,2-Tetrafluoroethane	(CAS No) 811-97-2	50 - 70	Liquefied gas, H280
Polyalkylene Glycol Alkyl Ether 100	(CAS No) Proprietary	30 - 50	Acute Tox. 4 (Oral), H302
Benzyl Butyl Phthalate	(CAS No) 85-68-7	1 - 5	Repr. 1B, H360

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May damage fertility or the unborn child.

Symptoms/injuries after inhalation : Coughing. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause drowsiness or dizziness. May cause respiratory irritation. Slight irritation. Possible inflammation of the respiratory tract.

Symptoms/injuries after skin contact : Blisters. Causes skin irritation. Red skin. Itching. Skin rash/inflammation.

Symptoms/injuries after eye contact : May cause slight eye irritation . Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : May be harmful if swallowed and enters airways. May be fatal if swallowed and enters airways.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Unsuitable extinguishing media

: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: NFPA Aerosol Level 1.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources.

6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Safety glasses.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill. Contain released substance, pump into suitable containers. Methods for cleaning up : Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Pressurized container: Do not pierce or burn, even after use.
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not handle until all safety precautions have been read and understood. Obtain special instructions.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
Storage area	: Store in a well-ventilated place.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls	: Local exhaust venilation, vent hoods.
Personal protective equipment	: Gloves. Safety glasses. Avoid all unnecessary exposure.

Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Liquid.
Color	: Red.
Odor	: Characteristic. Petroleum-like odour.
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 0.99
Solubility	: Insoluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)	
LD50 oral rat	500 mg/kg

Benzyl Butyl Phthalate (85-68-7)	
LD50 oral rat	2330 mg/kg (Rat)
LD50 dermal rat	6700 mg/kg (Rat)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6.7 mg/l/4h (Rat)

1,1,1,2-Tetrafluoroethane (811-97-2)	
LC50 inhalation rat (mg/l)	> 2000 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	> 359300 ppm/4h (Rat; Literature study)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Benzyl Butyl Phthalate (85-68-7)	
IARC group	3

	:	May damage fertility or the unborn child.
Reproductive toxicity		
Specific target organ toxicity (single exposure)	:	Not classified
	:	Not classified
Specific target organ toxicity (repeated exposure)		
	:	Not classified
Aspiration hazard		
Potential Adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	:	Coughing. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause drowsiness or dizziness. May cause respiratory irritation. Slight irritation. Possible inflammation of the respiratory tract.
Symptoms/injuries after skin contact	:	Blisters. Causes skin irritation. Red skin. Itching. Skin rash/inflammation.
Symptoms/injuries after eye contact	:	May cause slight eye irritation . Inflammation/damage of the eye tissue. Irritation of the eye tissue. Redness of the eye tissue.
Symptoms/injuries after ingestion	:	May be harmful if swallowed and enters airways. May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Benzyl Butyl Phthalate (85-68-7)	
LC50 fish 1	1.5 mg/l (96 h; Pimephales promelas; Measured concentration)
EC50 Daphnia 1	1.6 - 1.8 mg/l (48 h; Daphnia magna)
EC50 other aquatic organisms 1	0.64 mg/l (72 h; Diatomeae; Growth rate)
LC50 fish 2	0.82 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Measured concentration)
EC50 Daphnia 2	0.97 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	0.20 mg/l (72 h; Diatomeae; Growth rate)
Threshold limit algae 2	0.31 mg/l (72 h; Scenedesmus subspicatus; Growth rate)

1,1,1,2-Tetrafluoroethane (811-97-2)	
LC50 fish 1	450 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	980 mg/l (48 h; Daphnia magna)

12.2. Persistence and degradability

FJC R134A STOP LEAK	
Persistence and degradability	Not established.

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)	
Persistence and degradability	Not established.

Benzyl Butyl Phthalate (85-68-7)	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Biodegradability in soil: no data available. Adsorbs into the soil.

1,1,1,2-Tetrafluoroethane (811-97-2)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

FJC R134A STOP LEAK	
Bioaccumulative potential	Not established.

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)	
Bioaccumulative potential	Not established.

Benzyl Butyl Phthalate (85-68-7)	
BCF fish 1	188 (408 h; Lepomis macrochirus)
BCF fish 2	663 (504 h; Lepomis macrochirus)
BCF other aquatic organisms 1	26 - 270
Log Pow	3.57 - 5.8
Bioaccumulative potential	Not established.

1,1,1,2-Tetrafluoroethane (811-97-2)	
BCF other aquatic organisms 1	5 - 58 (Estimated value)
Log Pow	1.06 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground):	UN1078, Refrigerant gases, n.o.s., 2.2, Limited Quantity	
ICAO/IATA (air):	UN1078, Refrigerant gases, n.o.s., 2.2 , Limited Quantity	
IMO/IMDG (water):	UN1078, Refrigerant gases, n.o.s. (1,1,1,2-Tetrafluoroethane, Petroleum Distillates), 2.2	
Special Provisions:	T50 - this subchapter.	‹ instruction T50 is referenced in Column (7) of the 172.101 Table, the applicable liquefied uthorized to be transported in portable tanks in accordance with the requirements of 173.313 of

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Refrigerant gases, n.o.s.

Department of Transportation (DOT) Hazard : Classes 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115

Hazard labels (DOT) : 2.2 - Non-flammable gas

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the applicable liquefied compressed gases are authorized to be transported in portable tanks in accordance with the requirements of 173.313 of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Packaging Non Bulk (49 CFR 173.xxx) : 304

DOT Packaging Bulk (49 CFR 173.xxx) : 314;315

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 150 kg

SECTION 15: Regulatory information

15.1. US Federal regulations

FJC R134A STOP LEAK	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Immediate (acute) health hazard Sudden release of pressure hazard

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1,1,1,2-Tetrafluoroethane (811-97-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Sudden release of pressure hazard

15.2. International regulations

CANADA

FJC R134A STOP LEAK	
WHMIS Classification	Class A - Compressed Gas

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)
Listed on the Canadian DSL (Domestic Sustances List)

1,1,1,2-Tetrafluoroethane (811-97-2)	
WHMIS Classification	Class A - Compressed Gas

EU-Regulations

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Repr.Cat.2; R61
Xn; R22

Full text of R-phrases: see section 16

15.2.2. National regulations

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)

Listed on KECI (Korean Existing Chemicals Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

Polyalkylene Glycol Alkyl Ether 100 (Proprietary)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List Connecticut Right to Know Florida Right to Know Illinois Right to Know Louisiana Right to Know Michigan Right to Know

SECTION 16: Other information

Other information : None.

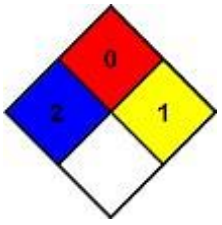
Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Liquefied gas	Gases under pressure Liquefied gas
Repr. 1B	Reproductive toxicity Category 1B
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H360	May damage fertility or the unborn child

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 1 Slight Hazard

Personal Protection : B

SDS US (GHS HazCom 2012) - TCC

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Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing,

storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet