



SUPERCOOL R-134a REFRIGERANT PLUS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

1.1. Product identifier

Product form : Mixture
Trade name : SUPERCOOL R-134a REFRIGERANT PLUS
CAS No. : 811-97-2
Product code : 24261, 24278, 27736

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

Use of the substance/preparation : Supercool R-134a Refrigerant Plus is used as Oil Charge, Performance Enhancer, and Leak Stop in R-134a refrigeration systems.
Use of the substance/preparation : Refrigerant gas

1.3. Details of the supplier of the safety data sheet

Tire Seal, Inc.
3574 Corona Street
33461 Lake Worth, Florida - USA
T 561-582-2245 - F 561-582-1499
www.supercool.ac

1.4. Emergency telephone number

Emergency number : (352) 472-7295
DGA/AAG ENVIROMENTAL Contract No. 10-057

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Not classified

2.2. Label elements

GHS-US labeling

No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification (GHS-US)
1,1,1,2-tetrafluoroethane (Main constituent)	(CAS No.) 811-97-2	80 - 90	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Content under pressure. "Frostbite-like" effects may occur if the liquid or escaping vapors contact the eyes or skin. Gross inhalation over exposure may cause: Central nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness or death. Vomiting: prevent asphyxia/aspiration pneumonia.

First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and shoes, and launder before reuse. Use approved skin lotions or creams to replace lost skin oils. Treat for frostbite if necessary by gently warming affected area.

First-aid measures after eye contact : In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

First-aid measures after ingestion : DO NOT INDUCE VOMITING. Give nothing by mouth. Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

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

Symptoms/injuries after inhalation : Central nervous system depression. Dizziness. Mental confusion.

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 : Carbon dioxide. BC powder. Water fog, carbon dioxide, foam, dry chemical. Use water spray to keep containers cool that are exposed to heat or flames.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Warning!! Contents under pressure. Container may rupture under fire conditions. Decomposition may occur. Wear approved positive-pressure self-contained breathing apparatus and protective clothing.

6.1.1. For non-emergency personnel

Protective equipment : Wear appropriate protective clothing and equipment to prevent skin and eye contact.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Keep away from drains.

6.3. Methods and material for containment and cleaning up

For containment : Increase area ventilation. Do not puncture or incinerate container. Contents under pressure.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : CAUTION: COMPRESSED GAS. Do not puncture, incinerate or store above 120 F. Do not store in passenger compartment of automobile. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Should not be mixed with air for leak testing or used for any other purpose above atmospheric pressure.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Do not store above 120 F.
Storage temperature : 49 °C Do not store in passenger compartment of automobiles.
Storage area : Store in a dry area. Store in a cool area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls : Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Showers. Eyewash stations.
Hand protection : Insulated gloves.
Eye protection : Protective goggles. Safety glasses. Wear safety glasses or goggles to protect against exposure.
Skin and body protection : Avoid skin contact. Wear protective clothing and gloves.
Respiratory protection : Use in a well ventilated area.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear, colorless liquid or gas at ambient temperatures.

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Color	: No data available
Odor	: Ether-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	: -26.5 °C
Flash point	: No data available
Self 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	: No data available
Solubility	: No data available
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

Gas group : Liquefied gas

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions. Stable under normal temperatures and pressures.

10.3. Possibility of hazardous reactions

Hazardous Polymerization: WILL NOT OCCUR.

10.4. Conditions to avoid

Do not expose to heat or store at temperatures above 120 F.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon monoxide. Carbon Dioxide. This material can be decomposed by high temperatures forming hydrofluoric acid and possibly carbonyl fluoride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

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Symptoms/injuries after inhalation : Central nervous system depression. Dizziness. Mental confusion.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Disposal should be made in accordance with federal, state and local regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT) : 3159

14.2. UN proper shipping name

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 compressed gas



14.2 Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

SUPERCOOL R-134a REFRIGERANT PLUS (811-97-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

SUPERCOOL R-134a REFRIGERANT PLUS (811-97-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

No additional information available

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

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Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

SDS US (GHS HazCom 2012) new

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