



Safety Data Sheet

Petra R-134a Refrigerant with ICE 32 and UV Dye 9021

HMIS Ratings	
Health	1
Flammability	1
Reactivity	0
Protection	B

Section 1: Identification

Product Name:	Petra R-134a Refrigerant with ICE 32 and UV Dye
Product Use:	Refrigerant.
Restrictions on Use:	None known.
Manufactured For:	Petra Oil Company 11085 Regency Green Drive Cypress, Texas 77429
Phone Number:	(713) 856-5700
Fax Number:	(713) 856-5712
Emergency Phone:	CHEMTREC 1-800-424-9300 For International Calls: (703) 527-3887

Section 2: Hazard Identification

Hazard Class:	Gases under Pressure – Compressed Gas, Skin Irritation Category 2, Simple Asphyxiant.
Signal Word(s):	Warning
Hazard Statement:	Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation. Causes skin irritation.

Pictogram Classes:



Precautionary Measures: Wash thoroughly after handling. Wear protective gloves. Take off contaminated clothing and wash before reuse. Protect from sunlight. Store in well-ventilated place. Do not expose to temperatures exceeding 50°C / 122°F.

Miscellaneous Hazards: Inhalation in high-concentrations may cause respiratory irritation and CNS depression. Vapor spray may cause freeze burns.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Concentration (Wgt.%)
1,1,1,2-Tetrafluoroethane	811-97-2	30-70
Additive Mixture – Trade Secret	Proprietary Mixture	30-70
UV Dye	N/A	0-0.05
Non-hazardous and other ingredients below reportable levels	Proprietary	0-40

Section 4: First Aid Measures

Skin Contact Wash affected area with plenty of water. If irritation persists, seek medical advice.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses if present/able. Continue rinsing. If eye irritation persists, get medical advice/attention.

Inhalation Move person to fresh air. Seek medical attention if problems develop or persist.

Ingestion Not an expected route of exposure.

Notes for Immediate Care / Physician N/A

Section 5: Fire Fighting Measures

Hazardous Combustion Products:

Carbon monoxide, carbon dioxide, HF, fluorinated hydrocarbons, and oxides of fluoride.

Extinguishing Media:

Use media appropriate for surrounding fire. Cool exposed containers with water.

General Fire Hazards:

Contents under pressure. Exposure to high heat may cause them to rupture with violent force.

Fire Fighting Equipment and Instructions:

Firefighters should wear full protective gear. Cool fire-exposed containers with water.

Section 6: Accidental Release Measures

Personal Protection/PPE:

Wear safety glasses or goggles and gloves to avoid skin and eye contact.

Emergency Procedures:

Ensure ventilation to avoid inhalation. Use caution, as large amounts of liquid may produce a slip hazard.

Containment Procedures:

Stop the flow of material, if this is without risk. If can is leaking, place into pail or bucket in well-ventilated area until pressure has dissipated. Absorb with inert absorbent such as dry clay, sand, diatomaceous earth, or commercial sorbents. Shovel into appropriate container for disposal

Cleanup Procedures:

Absorb spill with inert material. Shovel material into appropriate container for disposal.

Section 7: Handling and Storage

Handling Procedures:

Avoid skin or eye contact with this material. Wash thoroughly after handling. Use with ventilation, and do not breathe aerosol. Contents are under pressure, so do not puncture or incinerate cans, even when 'empty.'

Storage Procedures:

Store in cool, well-ventilated place. Store out of sunlight, at temperatures below 120°F.

Section 8: Exposure Controls/Personal Protection

Chemical	CAS Number	PEL-OSHA	Exposure Limits	
			TLV-ACGIH	Carcinogen
1,1,1,2-Tetrafluoroethane	811-97-2	N/A	N/A	No
Additive Mixture – Trade Secret	Proprietary Mixture	N/A	N/A	No
UV Dye	N/A	N/A	N/A	No
Non-hazardous and other ingredients below reportable levels	Proprietary	N/A	N/A	N/A

Special Note: 1,1,1,2-Tetrafluoroethane has an AIHA WEEL with 1000 ppm as the TWA 8 hour exposure limit.

Engineering Controls:

Use local exhaust ventilation.

Personal Protective Equipment:**Eyes/Face:**

Wear safety glasses or goggles if eye contact is possible.

Skin:

Use impervious gloves.

Respiratory:

If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided.

General:

Use good hygiene practices when handling this material, including changing and laundering work clothes after use.

Section 9: Physical and Chemical Properties

Appearance:	Bright yellow liquid in aerosol can
Flammability Limits:	Not applicable.
Explosive Limits:	Not applicable.
Odor:	None.
Odor Threshold:	Not available.
Vapor Density:	3.3 (Air 1.0)
Vapor Pressure:	4268 mmHg @ 20°C.
pH:	<7
Relative Density:	1.086
Melting Point:	-15.7°F (-26.5°C)
Solubility:	Negligible solubility in water.
Initial Boiling Point/Boiling Range:	572°F (300°C)
Flash Point:	348°F (176°C)
Autoignition Temperature:	>400°C
Evaporation Rate:	>120 (n-butyl acetate = 1.0)
Partition Coefficient (n-octanol/water):	Not available.
Decomposition Temperature:	Not available.
Viscosity:	25 cPa @ 20°C

Section 10: Stability and Reactivity

Reactivity:

Will react with strong oxidizing agents.

Chemical Stability:

This is a stable material. Container may explode at heat >120°F.

Hazardous Decomposition:

Hazardous combustion products may include carbon monoxide, carbon dioxide, and other hydrocarbon fragments, along with HF and fluorinated hydrocarbons.

Hazardous Polymerization:

Will not occur.

Incompatible Materials:

Strong oxidizing agents (peroxides, chlorine, strong acids).

Conditions Leading to Hazard:

Storage with strong oxidizers. Storage in heat, near ignition source, or by open flame.

Section 11: Toxicological Information

Acute Toxicity Estimate – Oral: >5000 mg/kg

Acute Toxicity Estimate – Dermal: >5000 mg/kg

Reproductive Toxicity/Germ Cell Mutagenicity: No ingredients with positive in vivo results.

Skin/Inhalation Sensitization: No known sensitizing components.

Carcinogenicity: No carcinogenic components.

Section 12: Ecological Information

Existing Structure Activity Relationship (SAR) and Experimental data on the components of this product indicate neither Acute or Chronic categorization. Bioaccumulation and other routes of aquatic contamination are not expected to be contributory.

None of the components of this product are listed in the Montreal Protocol or its Amendments. HFC-134a has a GWP of 1300.

Section 13: Disposal Concerns

Dispose of waste material in accordance with Local, State, Federal, and Provincial Environmental Regulations.

Section 14: Transport Information

US DOT and International HMR Information

Proper Shipping Name:	Aerosol, non-flammable, each not exceeding 1L capacity (HFC-134a)
Identification Number:	UN1950
Hazard Class:	2.2
Special Note:	Limited Quantity

