

Enviro-Safe Refrigerant Industrial 134a Cylinders

1	PRODUCT AND COMPANY IDENTIFICATION
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Product Identifier: Enviro-Safe Refrigerant Industrial 134a Cylinders
SDS Number: 1070-1075
Revision Date: 3/12/2021
Version: 3.0
Product Description: Refrigerant

Supplier Details: Enviro-Safe Refrigerants, Inc.
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2	HAZARDS IDENTIFICATION
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Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):
 Physical, Flammable Gases, 1
 Physical, Gases Under Pressure, Compressed Gas

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H220 - Extremely flammable gas
 H280 - Contains gas under pressure; may explode if heated
 OSHA-H01 - May displace oxygen and cause rapid suffocation

GHS Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
 P381 - In case of leakage, eliminate all ignition sources.
 P403 - Store in a well-ventilated place.
 P410 + P403 - Protect from sunlight. Store in a well-ventilated place.

3	COMPOSITION/INFORMATION ON INGREDIENTS
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	Chemical Ingredients:	
CAS#	%	Chemical Name:
68476-85-7	100%	Petroleum gases, liquefied

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FIRST AID MEASURES

- Inhalation:** If symptoms develop, move to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, seek medical attention. Immediately call a POISON CENTER or doctor/physician.
- Skin Contact:** If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention.
- Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- Ingestion:** Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

4.2. Effects and Symptoms, Both Acute and Delayed

Symptoms/Injuries: Gas can be toxic as a simple asphyxiant by displacing oxygen from the air.

Symptoms/Injuries Ingestion: Ingestion is an unlikely route of exposure for a gas.

Symptoms/Injuries Inhalation: Asphyxiant gas.

Symptoms/Injuries Skin Contact: May cause frostbite. Exposure may produce an allergic reaction.

Symptoms/Injuries Eye Contact: Contact with the liquefied gas causes frostbite.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

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FIRE FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry powder, or carbon dioxide can be directed at flame area to reduce fire intensity.

Unsuitable Extinguishing Media: Do not extinguish flames unless leak can be stopped.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Extremely flammable gas.

Explosion Hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity: Contains gas under pressure; may explode if heated.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: If possible, stop flow of gas. Use water to cool fire-exposed tanks, surroundings and to protect personnel working on shut off.

If leak cannot be stopped, evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

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ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Keep away from open flames, hot surfaces and sources of ignition. No smoking. Do not get in eyes, on skin, or on clothing. Do not breathe gas.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Eliminate ignition sources.

6.1.2. For Emergency Responders

Protective Equipment: Equip clean up crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Ventilate area.

6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Stop leak without risks if possible.

Methods for CLeaning Up: Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

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HANDLING AND STORAGE

Handling Precautions:	7.1. Precautions for Safe Handling Precautions for Safe Handling: Personnel should be trained to regularly inspect equipment such as pumps, hoses, and valves. Do not breathe gas. Ensure there is adequate ventilation. Close valve after each use and when empty. Open valve slowly to avoid pressure shock.
Storage Requirements:	7.2. Conditions for Safe Storage, Including Any Incompatibilities Technical Measures: Comply with applicable regulations. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling. Keep at temperatures below 52 °C / 125 °F. Storage Conditions: Store in a dry, cool and well-ventilated place. Keep in fireproof place. Store locked up. Store away from strong oxidizing agents, chlorine dioxide, excessive heat and/or static discharge. Incompatible Products: Heat sources. Oxidizers. 7.3. Specific End Use(s): Refrigerant.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Alarm detectors should be used when toxic gases may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.
Personal Protective Equipment:	Petroleum gases, liquefied cas#:(68476-85-7) [100%] Gas mask. Protective goggles. Gloves. Protective clothing. Materials for Protective Clothing: Chemically resistant materials and fabrics. Hand Protection: Wear working gloves when handling gas containers. Eye Protection: Safety glasses. Skin and Body Protection: Wear suitable protective clothing. Respiratory Protection: use a NIOSH-approved self-contained breathing apparatus in oxygen deficient atmospheres. Thermal hazard Protection: Wear cold insulating gloves.

Petroleum gases, liquefied (68476-85-7)

USA ACGIH - ACGIH TWA (ppm): 1000ppm
 USA NIOSH - NIOSH REL (TWA) (mg/m3): 1800mg/m3
 USA NIOSH - NIOSH REL (TWA) (ppm): 1000ppm
 USA IDLH - US IDLH (ppm): 2100ppm (10% LEL)
 USA OSHA - OSHA PEL (TWA) (mg/m3): 1800mg/m3
 USA OSHA - OSHA PEL (TWA) (ppm): 1000ppm

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless gas.	Odor:	Odorless
Physical State:	Gas	Solubility:	No data available
Odor Threshold:	No data available	Freezing or Melting Point:	- 176.67 °C (- 286 °F)
Specific Gravity or Density:	0.53 / 0.53 (water = 1)	Flash Point:	No data available
Viscosity:	No data available	Vapor Density:	(at 20 °C added to vapor density) 1.64
Boiling Point:	- 37.8 °C (- 36.1 °F)	Autoignition Temperature:	674.44 °C (1246 °F)
Partition Coefficient:	No data available	Upper Flammability Limit and Lower Flammability Limit:	9% / 2.6%
Vapor Pressure:	586.05 kPa (85 psi) at 21.1 °C (70 °F)		
Potentia Hydrogenii:	No data available		
Evaporation Rate:	No data available		
Decompression Temperature:	No data available		

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STABILITY AND REACTIVITY

Reactivity:	Contains gas under pressure; may explode if heated. Vapor may ignite if exposed to static discharge.
Chemical Stability:	Stable under recommended handling and storage conditions (see section 7).
Conditions to Avoid Identification:	Direct sunlight. Extremely high or low temperatures. Open flame. Heat. Sparks. Static Discharge.
Materials to Avoid Identification:	Oxidizing agents such as chlorine, permanganates and dichromates.
Hazardous Decomposition:	Carbon oxides (CO, CO ₂).
Hazardous Polymerization:	Hazardous polymerization will not occur.

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TOXICOLOGICAL INFORMATION

Petroleum gases, liquefied cas#(68476-85-7)

Information on Toxicology

Acute Toxicity: Not classified

LC50 Inhalation Rat: 658mg/l/4h

Petroleum Oil: > 2000 mg/kg

LD 50 Oral Rat: > 2000 mg/kg

LD50 Dermal Rat: > 2000 mg/kg

LC50 Inhalation Rat: > 2000 mg/kg

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitiation: 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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ECOLOGICAL INFORMATION

Petroleum gases, liquefied cas#(68476-85-7) [100%]

Information on Ecology

Toxicity: No additional information

Persistence and Degradability: No additional information available

Bioaccumulative Potential ---

Enviro-Safe Oil Charge 3

Log Pow: < 1

Petroleum gases, liquefied (68476-85-7)

Log Pow: 2.3

Mobility in Soil: No additional information available

Other Adverse Effects: No additional information available

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DISPOSAL CONSIDERATIONS

Petroleum gases, liquefied cas#(68476-85-7) [100%]

Information on Disposal

Waste Treatment Methods

Waste Disposal Recommendation: Dispose of waste in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Empty product containers may contain hazardous residue. Do not reuse empty containers without commercial cleaning or reconditioning.

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14 **TRANSPORT INFORMATION**

UN1075, Petroleum gases, liquefied or Liquefied petroleum gas, 2.1



15 **REGULATORY INFORMATION**

[%] RQ (CAS#) Substance - Reg Codes

[100%] Petroleum gases, liquefied (68476-85-7) MASS, OSHAWAC, PA, TSCA, TXAIR

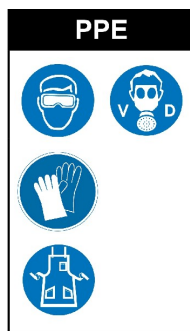
This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Regulatory Code Legend

- MASS = MA Massachusetts Hazardous Substances List
- OSHA WAC = OSHA Workplace Air Contaminants
- PA = PA Right-To-Know List of Hazardous Substances
- TSCA = Toxic Substances Control Act
- TXAIR = TX Air Contaminants with Health Effects Screening Level

16 **OTHER INFORMATION**

HMIS	
HEALTH	<input type="checkbox"/> <input type="checkbox"/>
FLAMMABILITY	<input type="checkbox"/>
PHYSICAL HAZARD	<input type="checkbox"/>
PERSONAL PROTECTION	<input type="checkbox"/> J



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