

Safety Data Sheet

Enviro-Safe Refrigerants, Inc.

Enviro-Safe Arctic Air

1 PRODUCT AND COMPANY IDENTIFICATION **Product Identifier:** Enviro-Safe Arctic Air Product Use: Boost AC cooling performance **Supplier Details:** Enviro-Safe Refrigerants, Inc. 400 Margaret Street Pekin, IL 61554 **Emergency:** Chemtrec 1-800-424-9300 309-346-1110 Phone: envirosafe2000@hotmail.com Email: Web: www.es-refrigerants.com

HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Gases, 1 Health, Skin sensitization, 1 Physical, Gases Under Pressure, Liquefied Gas

GHS Label elements, including precautionary statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:

2



GHS Hazard Statements:

- H220 Extremely flammable gas
- H317 May cause an allergic skin reaction
- H280 Contains gas under pressure; may explode if heated

GHS Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+352 IF ON SKIN: Wash with soap and water.
- P321 Specific treatment (see Section 4 on this label).
- P333+313 If skin irritation or a rash occurs: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P377 Leaking gas fire: Do not extinguish unless leak can be stopped safely.
- P381 Eliminate all ignition sources if safe to do so.
- P410+403 Protect from sunlight. Store in a well ventilated place.
- P501 Dispose of contents/container to local, regional, national and international regulations.

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas# %	Chemical Name
68476-85-7	99% Petroleum gases, liquefied
64742-54-7	1% Distillates, petroleum, hydrotreated heavy paraffinic

4 FIRST AID MEASURES

Inhalation:	When symptoms occur: go into open air and ventilate suspected area. 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.

Effects and symptoms, both acute and delayed:

Ingestion:	Ingestion is an unlikely route of exposure for a gas.
Inhalation:	Asphyxiate gas.
Skin contact:	May cause frostbite. May cause an allergic skin reaction.
Eye contact:	Contact with the liquefied gas causes frostbite.
Chronic Symptoms:	Exposure may produce an allergic reaction.

Indication of any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

5	FIRE FIGHTING MEASURES
LEL:	1.9%
UEL:	8.5%
Extinguishing Media	
Suitable:	Dry chemical powder, alcohol-resistant foam, carbon dioxide.
Unsuitable fire extinguis	her: Do not use a heavy water stream. Use of heavy water stream may spread fire.
Special Hazards Arising	g from the Substance or Mixture
Fire Hazard:	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. Reacts with strong oxidants causing fire and explosion hazard.
Advice for Fire Fighter	S
Precautionary Measures	Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions:	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog
	for cooling exposed containers.
Protection During Firefig	hting: Do not enter fire area without proper protective equipment, including respiratory protection.

ACCIDENTAL RELEASE MEASURES

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.

For Non-emergency Personnel

6

Protective Equipment: Use appropriate personal protection equipment (PPE). **Emergency Procedures:** Evacuate unnecessary personnel. Eliminate ignition sources.

For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection. **Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Stop Leak without risks if possible. Do not take up in combustible material such as: saw dust or cellulosic material. Methods for Clean Up: Contact competent authorities after a spill.

7	HANDLING AND STORAGE
Handling Precautions:	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.
	Consider normal working hygiene.
	Wash thoroughly after handling.
Storage Requirements:	Comply with applicable regulations.
	Cylinders should be stored upright.
	Keep at temperatures below 52°C/125°F.
	Store in cool/dry and well ventilated area.
	Keep away from heat, sparks, and flames.

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/locl regulations are observed.
Personal Protective Equipme	ent:
	Petroleum gases, liquefied (68476-85-7) [99%]

EXPOSURE CONTROLS/PERSONAL PROTECTION



Personal protective equipment Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: 480 min Material tested: Vitoject (KCL 890 / Aldrich Z677698, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 60 min Material tested: Camatril (KCL 730 / Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)

6659 87300, email sales @kcl.de, test method: EN374. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sold means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Petroleum gases, liquefied (68476-85-7) [99%]

Components with workplace control parameters

TWA 1,000 ppm USA. ACGIH Threshold Limit Values (TLV) Central Nervous System impairment Cardiac sensitization

TWA	1,000 ppm	USA. Occupational Exposure Limits
	1,800 mg/m3	(OSHA) - Table Z-1 Limits for Air
Contaminants		
The val	ue in mg/m3 is app	roximate.

TWA	1,000 ppm 1,800 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	1,000 ppm 1,800 mg/m3	USA. NIOSH Recommended Exposure Limits

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless gas.		
Physical State:	Gas	Freezing/Melting Pt.:	-166°C (-267.1°F)
Spec Grav./Density:	.540	Flash Point:	-104°C (-155°F)
Boiling Point:	-34.7°C (-30.4°F)	Vapor Density:	1.76
Partition Coefficient:	<1	Auto-Ignition Temp:	862.8°C (1585°F)
Vapor Pressure:	70 @ 21.1°C (70°F)	UFL/LFL:	8.5% / 1.9%
Evap. Rate:	Rapid		

STABILITY AND REACTIVITY

Reactivity: Chemical Stability:	Contains gas under pressure; may explode if heated. Reacts with oxidants causing fire and explosion hazard. Stable under recommended handling and storage conditions
Conditions to Avoid:	Direct sunlight Extremely high or low temperatures
	Open Flame Heat
Materials to Avoid:	Sparks Heat
Hazardous Decomposition:	Strong Oxidizing Agents.
Hazardous Polymerization:	Carbon oxides
	Will not occur.

11

10

TOXICOLOGICAL INFORMATION

Petroleum gases, liquefied (68476-85-7) [99%] Information on toxicological effects

Acute toxicity: no data available Inhalation: no data available Dermal: no data available Skin corrosion/irritation: no data available Serious eye damage/eye irritation: no data available Respiratory or skin sensitization: no data available Germ cell mutagenicity: no data available Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity: no data available Specific target organ toxicity - single exposure: no data available Specific target organ toxicity - repeated exposure: no data available Aspiration hazard: no data available Additional Information: RTECS: TX2275000

Dizziness, Drowsiness, Unconsciousness

12

ECOLOGICAL INFORMATION

Petroleum gases, liquefied (68476-85-7) [99%]

Information on ecological effects

Toxicity: no data available Persistence and degradability: no data available Bio accumulative potential: no data available Mobility in soil: no data available Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted Other adverse effects: no data available 13

DISPOSAL CONSIDERATIONS

Petroleum gases, liquefied (68476-85-7) [99 %]

Waste treatment methods

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.



Component (CAS#) [%] - CODES

Petroleum gases, liquefied (68476-85-7) [99%] MASS, NJHS, OSHAWAC, PA, TSCA, TXAIR Distillates, petroleum, hydrotreated heavy paraffinic

(64742-54-7) [1%] NJHS, TSCA

16

OTHER INFORMATION

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s). This information is given in good faith and based on our current knowledge of the product.

Author: Jeanette Akright Publication Date: July 31, 2015