

## Enviro-Safe Arctic Air Plus

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Enviro-Safe Arctic Air Plus  
**SDS Number:** 2095  
**Revision Date:** 1/20/2020  
**Version:** 2.0  
**Product Description:** Removes moisture in the A/C system and has an added stop leak for the "O" rings and gaskets.  
**Supplier Details:** Enviro-Safe Refrigerants, Inc.  
 400 Hanna Dr.  
 Pekin, IL 615 54  
**Contact:** Randy Price  
**Phone:** 309-346-1110  
**Fax:** 309-346-1237  
**Email:** info@es-refrigerants.com  
**Internet:** www.es-refrigerants.com  
**Emergency:** CHEMTREC 1-800-424-9300

### 2 HAZARDS IDENTIFICATION

#### Classification of Substance

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

Physical, Flammable Gases, 1  
 Physical, Gases Under Pressure, Compressed Gas  
 Health, Respiratory or skin sensitization, 1 Skin

#### 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  
 H317 - May cause an allergic skin reaction

##### GHS Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces.  
 P220 - Keep away from clothing and other combustible materials.  
 P233 - Keep container tightly closed.  
 P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
 P242 - Use only non-sparking tools.  
 P243 - Take precautionary measures against static discharge.  
 P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P264 - Wash skin thoroughly after handling.  
 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.  
 P303 + P361+ P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P321 - Specific treatment (see supplemental first aid instructions on this label).  
 P333 + P313 - If skin irritation or 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 - In case of leakage, eliminate all ignition sources.

## Enviro-Safe Arctic Air Plus

P403 - Store in a well-ventilated place.  
P410 + P403 - Protect from sunlight. Store in a well-ventilated place.  
P501 - Dispose of contents/ container to an approved waste disposal plant.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients:		
CAS#	%	Chemical Name:
68476-85-7	90-95%	Petroleum gases, liquefied
138-86-3	1-5%	Dipentene
64742-54-7	1-5%	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.

**4.1. Description of First Aid Measures**  
**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

**4.2. Most Important Symptoms and Effects, Both Acute and Delayed**  
**Symptoms/Injuries:** Gas can be toxic as simple asphyxiant by displacing oxygen from the air. Refrigerated liquefied gas. Contact with product may cause cold burns or frostbite.  
**Symptoms/Injuries After Inhalation:** Gas can be toxic as a simple asphyxiant by displacing oxygen from the air.  
**Symptoms/Injuries After Skin Contact:** May cause frostbite. May cause skin irritation.  
**Symptoms/Injuries After 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.  
**Symptoms/Injuries After Ingestion:** Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.  
**Chronic Symptoms:** Exposure may produce an allergic reaction. Indication of any immediate medical attention and special treatment needed.

**4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed**  
If exposed or concerned, get medical advice and attention.

### 5 FIRE FIGHTING MEASURES

**5.1. Extinguishing Media**  
**Suitable Extinguishing Media:** Dry chemical powder, alcohol-resistant foam, carbon dioxide.  
**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy water stream may spread fire.

**5.2. Special Hazards Arising 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.

**5.3. Advice for Firefighters**  
**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 Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

### 6 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

## Enviro-Safe Arctic Air Plus

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.

### 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 the the environment.

### 6.3. 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 Cleaning Up:** Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

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

## 7

### 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.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

#### Storage Requirements:

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Keep at temperatures below 52 °C/125 °F.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep away from heat, sparks, and flames.

#### 7.3. Specific End Use(s)

Removes moisture in the A/C system and has an added stop leak for the "O" rings and gaskets.

## 8

### 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:

HMIS PP, J | Splash Goggles, Gloves, Apron, Dust and Vapor Resp

### PPE

Petroleum gases, liquefied cas#:(68476-85-7) [90-95%]

**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.

Dipentene cas#:(138-86-3) [1-5%]

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: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min Material tested: Camatril (KCL 730 / Aldrich 2677442, Size M)



## Enviro-Safe Arctic Air Plus

**Splash Contact:** Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 30 min Material tested: Dermatrill (KCL 740 / Aldrich 2677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail 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:** Complete suit protecting against chemicals, flame retardant anti-static 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 ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole 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. Discharge into the environment must be avoided.

Petroleum gases, liquefied cas#:(68476-85-7) [90-95%]

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

Dipentene cas#:(138-86-3) [1-5%] Components

with workplace control parameters

TWA	30 ppm	USA. Workplace Environmental Exposure Levels (WEEL)
-----	--------	---

9

### PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear, colorless gas	<b>Odor:</b>	Pine scent
<b>Physical State:</b>	Gas	<b>Solubility:</b>	N/A
<b>Odor Threshold:</b>	N/A	<b>Freezing or Melting Point:</b>	-166 °C (-267.1 °F)
<b>Specific Gravity or Density:</b>	0.540	<b>Flash Point:</b>	-104 °C (-155 °F)
<b>Viscosity:</b>	N/A	<b>Vapor Density:</b>	1.76
<b>Boiling Point:</b>	- 34.7 °C (- 30.4 °F)	<b>Autoignition Temperature:</b>	862-8 °C (1585 °F)
<b>Partition Coefficient:</b>	<1	<b>Upper Flammability Limit and Lower Flammability Limit:</b>	
<b>Vapor Pressure:</b>	70 @ 21.1 °C	<b>Limit:</b>	N/A
<b>Potentia Hydrogenii:</b>	N/A		
<b>Evaporation Rate:</b>	Rapid		
<b>Decompression Temperature:</b>	N/A		

10

### STABILITY AND REACTIVITY

<b>Reactivity:</b>	Contains gas under pressure; may explode if heated. Reacts with oxidants causing a fire and an explosion hazard.
<b>Chemical Stability:</b>	Stable under recommended handling and storage conditions (see Section 7).
<b>Conditions to Avoid:</b>	Direct sunlight. Extremely high or low temperatures. Open flame. Heat. Sparks.

## Enviro-Safe Arctic Air Plus

<b>Materials to Avoid:</b>	Heat. Strong Oxidizing Agents.
<b>Hazardous Decomposition:</b>	Carbon oxides (CO, CO <sub>2</sub> ).
<b>Hazardous Polymerization:</b>	Hazardous polymerization will not occur.

### 11 TOXICOLOGICAL INFORMATION

Petroleum gases, liquefied cas#:(68476-85-7) [90-95 %]

#### Information on Toxicology

**Acute Toxicity:** Not classified  
 LC50 Inhalation Rat: 658mg/114h  
 Petroleum Oil: > 2000 mg/kg  
 LD50 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 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

Dipentene cas#:(138-86-3) [1-5%]

#### Information on Toxicological Effects

**Acute Toxicity-**  
 LD50 Oral - rat - 5,300 mg/kg  
 Inhalation: No data available  
 Dermal: No data available  
**Skin Corrosion/Irritation:** Skin - rabbit Result: Skin irritation - 24 h  
**Serious Eye Damage/Eye Irritation:** 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:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Distillates, petroleum, hydrotreated heavy paraffinic cas#:(68476-85-7)

## Enviro-Safe Arctic Air Plus

### Information on Toxicology

#### Acute Toxicity -

LD50 Oral Rat: > 15 g/kg

**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

12

### ECOLOGICAL INFORMATION

Petroleum gases, liquefied cas#:(68476-85-7) [90-95%]

#### Information on Ecology

**Toxicity:** No additional information

**Persistence and Degradability:** No additional information available

**Bioaccumulative Potential -**

Log Pow: 2.3

**Mobility in Soil:** No additional information available

**Other Adverse Effects:** No additional information available

Dipentene cas#:(138-86-3) [1-5%]

#### Information on Ecology

##### Toxicity-

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 80 mg/l - 96.0 h.

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 17 mg/l - 48 h.

Other aquatic invertebrates

**Persistence and Degradability:** No data available

**Bioaccumulative 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:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)

#### Information on Ecology

##### Toxicity-

LC50 Fish 1: > 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

EC50 Daphnia 1: > 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

**Persistence and Degradability:** No additional information available

**Bioaccumulative Potential:** No additional information available

**Mobility in Soil:** No additional information available

**Other Adverse Effects:** No additional information available.

13

### DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

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

## Enviro-Safe Arctic Air Plus

14

### TRANSPORT INFORMATION

**14.1. In Accordance with DOT**

Consumer Commodity, ORM-D

**14.2. In Accordance with IMDG**

**Proper Shipping Name:** Petroleum gases, liquefied

**Hazard Class:** 2.1

**Identification Number:** UN1075

**Label Codes:** 2.1

**EmS-No. (Fire):** F-D

**EmS-No. (Spillage):** S-U

**Marine Pollutant:** No

**14.3. In Accordance with IATA**

**Proper Shipping Name:** PETROLEUM GASES, LIQUEFIED

**Identification Number:** UN1075

**Hazard Class:** 2

**Label Codes:** 2.1

**ERG Code (IATA):** 10L



15

### REGULATORY INFORMATION

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

[90-95%] Petroleum gases, liquefied (68476-85-7) MASS, OSHAWAC, PA, TSCA, TXAIR

[1-5%] Dipentene (138-86-3) TSCA

[1-5%] Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7) NJHS, TSCA

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= 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

NJHS= NJ Right-to-Know Hazardous Substances

16

### OTHER INFORMATION

**Revision Date:** 01/20/2020

**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).

