IID COCCEnviro-Safe ProDry Concentrate & VS

DIFC Safety Data Sheet

REFRIGERANTS According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 07/01/2015 Date of issue: 03/09/2015

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Substance

Product Name: Enviro-Safe ProDry Concentrate & VS

1.2. Intended Use of the Product

Use of the Substance/Mixture: Eliminates moisture in an A/C system.

1.3. Name, Address, and Telephone of the Responsible Party

Company

E

Enviro-Safe Refrigerants, Inc. 400 Margaret Street Pekin, IL 61554 309-346-1110 **1.4. Emergency Telephone Number**

Emergency Number

: 1-800-424-9300 CHEMTREC – TOLL FREE 24 HOUR EMERGENCY TELEPHONE NUMBER

SECTION 2: HAZARDS IDENTIFICATION

SECTION 2: HAZARDS IDENTIFICAT	ion
2.1. Classification of the Substan	ce or Mixture
Classification (GHS-US)	
Flam. Liq. 2 H225	
Eye Irrit. 2A H319	
Full text of H-phrases: see section 16	
2.2. Label Elements	
GHS-US Labeling	
Hazard Pictograms (GHS-US)	: (H502 (H507 (H507
Signal Word (GHS-US)	: Danger
Hazard Statements (GHS-US)	: H225 - Highly flammable liquid and vapor.
	H319 - Causes serious eye irritation.
Precautionary Statements (GHS-US)	 P210 - Keep away from extremely high or low temperatures, ignition sources, and incompatible materials No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical, ventilating, and lighting equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P264 - Wash hands, forearms, and other exposed areas thoroughly after handling. P280 - Wear protective gloves, protective clothing, and eye protection. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name : Enviro-Sate ProDry Concentrate & VS		
Product Identifier	%	Classification (GHS-US)
(CAS No) 64-17-5	100	Flam. Liq. 2, H225 Eye Irrit. 2A, H319
	Product Identifier	Product Identifier %

3.2. Mixture

Not applicable

SECTION 4: FIRST AID MEASURES

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 (show the label if possible).

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/Injuries: Causes serious eye irritation.

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Chronic Symptoms: None expected under normal conditions of use.

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

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Powder, alcohol-resistant foam, water spray, carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor. Vapors may travel to source of ignition and flash back.

Explosion Hazard: May form flammable/explosive vapor-air mixture.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

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

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: 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.

Other Information: Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray). Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

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 cleanup crew with proper protection.

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

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6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. 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.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Take precautionary measures against static discharge. Use only non-sparking tools. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

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 when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers. Zinc. Attacks some forms of plastics, rubber, and coatings. Brass. Aluminum.

7.3. Specific End Use(s)

Eliminates moisture in an A/C system.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Ethyl alcohol	(64-17-5)	
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

8.2. Exposure Controls

Appropriate Engineering Controls

: Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Take precautionary measures against static discharges. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapors may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment

: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing Hand Protection Eye Protection Skin and Body Protection

- : Chemically resistant materials and fabrics.
- : Wear chemically resistant protective gloves.
- : Chemical safety goggles.

: Wear suitable protective clothing.

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Respiratory Protection	: Use a NIOSH-approved respirator or self-contained breathing apparatus wheneve exposure may exceed established Occupational Exposure Limits.	
Environmental Exposure Controls	: Do not allow the product to be released into the environment.	
Consumer Exposure Controls	: Do not eat, drink or smoke during use.	
SECTION 9: PHYSICAL AND CHEMICA	AL PROPERTIES	
9.1. Information on Basic Physical	and Chemical Properties	
Physical State	: Liquid	
Appearance	: No data available	
Odor	: No data available	
Odor Threshold	: No data available	
рН	: No data available	
Evaporation Rate	: No data available	
Melting Point	: -114.14 °C (-173.45 °F) (Ethyl Alcohol)	
Freezing Point	: No data available	
Boiling Point	: 78.29 °C (172.92 °F) (Ethyl Alcohol)	
Flash Point	: 13 °C (55.40 °F) (Ethyl Alcohol)	
Auto-ignition Temperature	: 363 °C (685.40 °F) (Ethyl Alcohol)	
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	
Specific gravity / density	: 0.7893 g/cm ³ at 20 °C (Ethyl Alcohol)	
Solubility	: No data available	
Partition Coefficient: N-Octanol/Water	: No data available	
Viscosity	: No data available	

9.2. Other Information No additional information available SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible Materials: strong acids. Strong bases. Strong oxidizers. zinc. Attacks some forms of plastics, rubber, and coatings. Brass. Aluminum.

10.6. Hazardous Decomposition Products: Carbon oxides (CO, CO2). May release flammable gases.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Enviro-Safe ProDry Concentrate & VS		
ATE (Dust/Mist)	4.62 mg/l/4h	
Ethyl alcohol (64-17-5)		
LD50 Oral Rat	10470 mg/kg	
LD50 Dermal Rat	20 ml/kg	
LC50 Inhalation Rat	124.7 mg/l/4h	

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

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Ethyl alcohol (64-17-5)

OSHA Hazard Communication Carcinogen List

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

In OSHA Hazard Communication Carcinogen list

Chronic Symptoms: None expected under normal conditions of use.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ethyl alcohol (64-17-5)	
LC50 Fish 1	(Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and Degradability

Ethyl a	alcohol	(64-17-5)	
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Persistence a	nd Degra	adability	1	Not established.

12.3. Bioaccumulative Potential

Ethyl alcohol (64-17-5)	
Log Pow	-0.32
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information

: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Consumer Commodity ORM-D

14.2. In Accordance with IMDG

Proper Shipping Name	: ETHANOL (ETHYL ALCOHOL)
Hazard Class	: 3
Identification Number	: UN1170
Packing Group	: 11
Label Codes	: 3
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D

14.3. In Accordance with IATA

Proper Shipping Name	:	ETHYL ALCOHOL
Packing Group	:	11
Identification Number	:	UN1170
Hazard Class	:	3
Label Codes	:	3
ERG Code (IATA)	:	3L





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SECTION 15: REGULATORY INFORMATION	
15.1 US Federal Regulations	
Enviro-Safe ProDry Concentrate & VS	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Fire hazard
Ethyl alcohol (64-17-5)	
Listed on the United States TSCA (Toxic Substances Cor	ntrol Act) inventory
15.2 US State Regulations	
Ethyl alcohol (64-17-5)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.
U.S California - Proposition 65 - Developmental	WARNING: This product contains chemicals known to the State of
Toxicity	California to cause birth defects.
Ethyl alcohol (64-17-5)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance	e List
U.S Pennsylvania - RTK (Right to Know) List	
SECTION 16: OTHER INFORMATION, INCLUDIN	NG DATE OF PREPARATION OR LAST REVISION
Revision Date	: 07/01/2015
Other Information	: This document has been prepared in accordance with the SDS
	requirements of the OSHA Hazard Communication Standard 29 CFR
	1910.1200.
GHS Full Text Phrases:	
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)