

Enviro-Safe ProDry Direct Inject

1	PRODUCT AND COMPANY IDENTIFICATION
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Product Identifier: Enviro-Safe ProDry Direct Inject
SDS Number: 2105AI
Revision Date: 3/23/2021
Version: 2.0
Product Description: Eliminates moisture in an A/C system.

Supplier Details: Enviro-Safe Refrigerants, Inc.
 400 Hanna Dr.
 Pekin, IL 61554

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
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Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):
 Physical, Flammable Liquids, 2

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H225 - Highly flammable liquid and vapour

GHS Precautionary Statements:

- P210 - Keep away from heat/sparks/open flames/hot surfaces.
- P233 - Keep container tightly closed.
- P240 - Ground/bond container and receiving equipment.
- P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment.
- P242 - Use only non-sparking tools.
- P243 - Take precautionary measures against static discharge.
- 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.
- P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- P403 + P235 - Store in a well-ventilated place. Keep cool.
- P501 - Dispose of contents/ container to an approved waste disposal plant.

3	COMPOSITION/INFORMATION ON INGREDIENTS
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	Chemical Ingredients:	
CAS#	%	Chemical Name:
64-17-5		Ethyl alcohol

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4 FIRST AID MEASURES

- Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- 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.
- 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. Rinse mouth. Immediately call a POISON CENTER or doctor/physician. 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: 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 include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Chronic Symptoms: None expected under normal conditions of use.

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

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: 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.

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 clean up crew with proper protection.

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

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.

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HANDLING AND STORAGE

Handling Precautions:

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, and 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.

Storage Requirements:

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/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.
 7.3. Specific End Use(s): Eliminates moisture in an A/C system.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Proper grounding procedures to avoid static electricity should be followed. 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:

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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: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min Material tested:Butoject (KCL 897 / Aldrich Z677647, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.2 mm Break through time: 38 min Material tested:Dermatril P (KCL 743 / Aldrich Z677388, 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: 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 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.

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Components with workplace control parameters

TWA 1,000 ppm USA. ACGIH Threshold Limit Values (TLV)
Upper Respiratory Tract irritation
Confirmed animal carcinogen with unknown relevance to humans

TWA 1,000 ppm USA. Occupational Exposure Limits
1,900 mg/m3 (OSHA) - Table Z-1 Limits for Air Contaminants
The value in mg/m3 is approximate.

TWA 1,000 ppm USA. NIOSH Recommended Exposure Limits
1,900 mg/m3

9	PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	Clear	Odor:	No data available
Physical State:	Liquid	Solubility:	No data available
Odor Threshold:	No data available	Freezing or Melting Point:	MP MPMPMPMPMP -114.14 °C (1173.45 °F)
Specific Gravity or Density:	0.7893 g/cm ³ at 20 °C	Flash Point:	13 °C (55.40 °F)
Viscosity:	No data available	Vapor Density:	No data available
Boiling Point:	78.29 °C (172.92 °F)	Autoignition Temperature:	363 °C (685.40 °)
Partition Coefficient:	No data available	Upper Flammability Limit and Lower Flammability Limit:	No data available
Vapor Pressure:	No data available		
Potentia Hydrogenii:	No data available		
Evaporation Rate:	No data available		
Decompression Temperature:	No data available		

10	STABILITY AND REACTIVITY
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Reactivity:	Hazardous reactions will not occur under normal conditions.
Chemical Stability:	Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.
Conditions to Avoid Identification:	Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials. Overheating. Open flame. Heat. Sparks.
Materials to Avoid Identification:	Strong acids. Strong bases. Strong oxidizers. Zinc. Attacks some forms of plastics, rubber, and coatings. Brass. Aluminum.
Hazardous Decomposition:	Carbon oxides (CO, CO ₂). May release flammable gas.
Hazardous Polymerization:	Hazardous polymerization will not occur.

11	TOXICOLOGICAL INFORMATION
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Information on toxicological effects

Acute toxicity:
LD50 Oral - rat - 7,060 mg/kg Remarks: Lungs, Thorax, or Respiration:Other changes.
LC50 Inhalation - rat - 10 h - 20000 ppm
Dermal: no data available

Skin corrosion/irritation: Skin - rabbit Result: No skin irritation - 24 h (OECD Test Guideline 404)
Serious eye damage/eye irritation: Eyes - rabbit Result: Mild eye irritation - 24 h (OECD Test Guideline 405)
Respiratory or skin sensitisation: no data available
Germ cell mutagenicity: no data available

Carcinogenicity:

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Carcinogenicity - mouse - Oral:

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Blood: Lymphomas including Hodgkins disease.

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.

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

Reproductive toxicity - Human - female - Oral:

Effects on Newborn: Apgar score (human only). Effects on Newborn: Other neonatal measures or effects. Effects on Newborn: Drug dependence.

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: KQ6300000

Central nervous system depression, narcosis, Damage to the heart., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

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ECOLOGICAL INFORMATION

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Information on ecological effects:

Toxicity: no data available

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: no data available

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DISPOSAL CONSIDERATIONS

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Waste treatment methods

Product: Contact a licensed professional waste disposal service to dispose of this material. 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.

Contaminated packaging: Dispose of as unused product.

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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: II

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: II

Identification Number: UN1170

Hazard Class: 3

Label Codes: 3

ERG Code (IATA): 3L

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15 REGULATORY INFORMATION

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

[--%] Ethyl alcohol (64-17-5) 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	PPE
HEALTH <input type="checkbox"/>	
FLAMMABILITY <input type="checkbox"/>	
PHYSICAL HAZARD <input type="checkbox"/>	
PERSONAL PROTECTION <input type="checkbox"/> J	

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Author: Jeanette Akright
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