

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 03/13/2015 Date of issue: 12/23/2014

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: ENVIRO-SAFE FUEL TREATMENT

1.2. Intended Use of the Product

Use of the Substance/Mixture: Anti-gel treatment for fuel systems.1.3. Name, Address, and Telephone of the Responsible Party

Company

Flam, Liq. 2

Enviro-Safe Refrigerants, Inc.

400 Margaret Street Pekin, IL 61554 309-346-1110

1.4. Emergency Telephone Number

Emergency Number : 1-800-424-9300

H225

CHEMTREC - TOLL FREE 24 HOUR EMERGENCY TELEPHONE NUMBER

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

riaini Liq. Z	11223
Acute Tox. 4	H332
(Inhalation:dust,mist)	
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Muta. 2	H341
Carc. 2	H351
STOT SE 3	H336
STOT RE 2	H373
Asp. Tox. 1	H304
Aquatic Acute 3	H402
Aquatic Chronic 2	H411
Full text of H-phrases: see	section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)









Signal Word (GHS-US)

Hazard Statements (GHS-US)

: Danger

: H225 - Highly flammable liquid and vapor.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H336 - May cause drowsiness or dizziness. H341 - Suspected of causing genetic defects.

H351 - Suspected of causing cancer.

H373 - May cause damage to organs through prolonged or repeated exposure.

H402 - Harmful to aquatic life.

 $\mbox{H411}$ - \mbox{Toxic} to a quatic life with long lasting effects.

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking. P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, lighting, ventilating equipment.

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P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe vapors, spray, mist.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear eye protection, face protection, protective clothing, protective gloves, respiratory protection.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a doctor, a POISON CENTER if you feel unwell.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see Section 4).

P331 - Do NOT induce vomiting.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362 - Take off contaminated clothing and wash before reuse.

P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO_2), dry extinguishing powder, dry sand, Water to extinguish.

P391 - Collect spillage.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Petroleum Distillates	(CAS No) Proprietary*	78	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Muta. 2, H341 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 3, H402 Aquatic Chronic 2, H411
Isopropyl alcohol	(CAS No) 67-63-0	22	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

Full text of H-phrases: see section 16

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^{*} The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret.

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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. May be fatal if swallowed and enters airways. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. May cause genetic defects. Causes skin irritation. Harmful if inhaled. May cause drowsiness or dizziness.

Symptoms/Injuries After Inhalation: Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. **Symptoms/Injuries After Skin Contact:** May cause skin irritation. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

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

Symptoms/Injuries After Ingestion: May be fatal if swallowed and enters airways.

Chronic Symptoms: Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. May cause genetic defects.

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: Water spray, fog, alcohol-resistant foam, carbon dioxide (CO₂), dry chemical powder.

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.

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.

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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.

7.3. Specific End Use(s)

Anti-gel treatment for fuel systems.

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).

Isopropyl alcohol (67-63-0)			
USA ACGIH	ACGIH TWA (ppm)	200 ppm	
USA ACGIH	ACGIH STEL (ppm)	400 ppm	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	980 mg/m³	
USA NIOSH	NIOSH REL (TWA) (ppm)	400 ppm	
USA NIOSH	NIOSH REL (STEL) (mg/m³)	1225 mg/m³	
USA NIOSH	NIOSH REL (STEL) (ppm)	500 ppm	
USA IDLH	US IDLH (ppm)	2000 ppm (10% LEL)	
USA OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³	
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm	
Petroleum Di	Petroleum Distillates		
USA ACGIH	ACGIH TWA (mg/m³)	100 mg/m³ (inhalable fraction and vapor)	

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 Respiratory Protection

: Chemically resistant materials and fabrics.

: Wear chemically resistant protective gloves.

: Chemical safety goggles.

: Wear suitable protective clothing.

: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

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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 CHEMICAL 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 pН : No data available **Evaporation Rate** : No data available : No data available **Melting Point Freezing Point** : No data available **Boiling Point** : No data available : No data available **Flash Point**

Decomposition Temperature: No data availableFlammability (solid, gas): No data availableVapor Pressure: No data availableRelative Vapor Density at 20 °C: No data availableRelative Density: No data availableSolubility: No data available

Partition Coefficient: N-Octanol/Water: No data availableViscosity: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

Auto-ignition Temperature

- **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.

: No data available

- 10.5. Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.
- 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: Inhalation:dust,mist: Harmful if inhaled.

ENVIRO-SAFE FUEL TREATMENT	
ATE (Dust/Mist)	4.62 mg/l/4h
Isopropyl alcohol (67-63-0)	
LD50 Oral Rat	4710 mg/kg
LD50 Dermal Rabbit	4059 mg/kg
LC50 Inhalation Rat	72600 mg/m³ (Exposure time: 4 h)
Petroleum Distillates	
LD50 Oral Rat	18.7 - 24.9 ml/kg
LD50 Dermal Rabbit	> 4300 mg/kg
ATE (Dust/Mist)	3.60 mg/l/4h

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Suspected of causing genetic defects.

Carcinogenicity: Suspected of causing cancer.

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Isopropyl alcohol (67-63-0)	
IARC group	3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness.

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Symptoms/Injuries After Inhalation: Harmful if inhaled. May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

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

Symptoms/Injuries After Ingestion: May be fatal if swallowed and enters airways.

Chronic Symptoms: Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. May cause genetic defects.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

Isopropyl alcohol (67-63-0)	
LC50 Fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC 50 Fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Other Aquatic Organisms 2	1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
Petroleum Distillates	
LC50 Fish 1	57 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

12.2. Persistence and Degradability No additional information available

12.3. Bioaccumulative Potential

Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25 °C)

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 : FLAMMABLE LIQUID, N.O.S. (Contains Isopropyl Alcohol and Petroleum Distillates)

Hazard Class : 3
Identification Number : UN1993
Packing Group : II
Label Codes : 3
Ems. No. (Fire) : E. E.

EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E

Marine Pollutant : Marine pollutant



14.3. In Accordance with IATA

Proper Shipping Name : Flammable liquid, n.o.s. (Contains Isopropyl Alcohol and Petroleum Distillates)

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Packing Group : II

Identification Number : UN1993 **Hazard Class** : 3

Label Codes : 3 ERG Code (IATA) : 3L



SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

ENVIRO-SAFE FUEL TREATMENT	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Fire hazard
	Delayed (chronic) health hazard
Isopropyl alcohol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 % (only if manufactured by the strong acid process, no supplier
	notification)
Petroleum Distillates	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2 US State Regulations

Isopropyl alcohol (67-63-0)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

Petroleum Distillates

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 03/13/2015

Other Information: This document has been prepared in accordance with the SDSrequirements of the OSHA Hazard Communication Standard 29 CFR

1040 1200

1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Muta. 2	Germ cell mutagenicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

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H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects

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)

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