MATERIAL SAFETY DATA SHEET

Enviro-Safe™
Stop Leak

SECTION 1 – IDENTIFICATION

Company: Enviro-Safe Refrigerants, Inc.
400 Margaret Street
Pekin IL 61554
309-346-1110

Product Name: Enviro-Safe™ Stop Leak
Proper Shipping Name: Consumer Commodity, ORM-D

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

SECTION 2 – PHYSICAL DESCRIPTION AND/OR PROPERTIES

Appearance/Odor:	Clear, Colorless; odor added	Physical State:	Gas
Odor Threshold:	None available	Specific Gravity:	0.540
Coeff. Water/Oil Dist.:	<1	Evaporation Rate:	Rapid
Freezing Point:	-267°F	Boiling Point:	-30.4°F
Vapor Density: (est.)	1.76	pH:	N/A
Vapor Pressure: (PSIG)	70 @ 70°F		

SECTION 3 – FIRE OR EXPLOSION HAZARD

Auto Ignition Temperature: 1585°F
Flashpoint: Not Available Lower Flammable Limit (LEL): 1.9% Upper Flammable Limit (UEL): 8.5%

Extinguish Media: If possible, stop flow of gas. Use water to cool fire-exposed tanks, surroundings and to protect personnel working on shut off. Water spray, dry powder, or carbon dioxide can be directed at flame area to reduce fire intensity. Do not extinguish flames unless leak can be stopped.

Hazardous Combustion Products: Normal combustion forms carbon monoxide**.**

Sensitivity to Static Discharge: Vapor may ignite if exposed to static discharge.

Explosion Data: Sensitivity to impact. Mixture is not sensitive.

Fire and Explosion Hazard: Flammable vapor may form if allowed to mix with air. Accumulation of gas is an ignition hazard. Vapors are heavier than air and may travel to an ignition source.

SECTION 4 – INGREDIENTS

Hazardous Ingredients	%	Cas Number	LD50	P.E.L.	ACGIH TLV UNITS
Alkanes	75-90	-	n.ap.	800 PPM	800 PPM
Methylene Chloride	1-2	75-09-2	n.ap.		
N-Methylpyrrolidone	1-2	872-50-4	n.ap.		
Polyolester	1-2	Proprietary			

SECTION 5 – REATIVITY DATA

Chemical Stability: This material is chemically stable.
Conditions To Avoid: .Avoid sparks, open flame or any source of ignition.
Incompatible Materials: Avoid contact with strong oxidizing agents such as chlorine, permanganates and dichromate's.
Decomposition Products: This product may produce carbon monoxide with a deficiency of oxygen.
Hazardous Polymerization: will not occur.
Polymerization To Avoid: Keep separate from oxidizing agents.

SECTION 6 – HEALTH HAZARD

As with most flammable products, hydrocarbon refrigerants demand basic common sense during use.

Inhaled/Asphyxiant: This product may cause irritation of the respiratory tract. May also cause headaches or dizziness at moderate exposures. Heavy exposure may cause anemia and irregular heart rhythm, respiratory arrest and death at elevated exposures.

Ingestion: Not likely to occur.

Eye Contact: Irritating if the liquid gets into eyes, with a possible hazard from freezing due to rapid evaporation. Extremely high vapor concentration may also be irritating.

Skin Contact: Exposure to rapidly expanding gas or vaporizing liquid may cause frost damage to tissue. Prolonged contact may irritate the skin and cause dermatitis.

Chronic: Prolonged exposure to this product may cause central nervous system disorder and or damage.

SECTION 7 - FIRST AID

Inhaled: In emergency situations, use proper respiratory protection and immediately remove the victim to fresh air. Administer artificial respiration if breathing has stopped. Seek medical attention promptly in serious cases of over exposure.

Eyes: Flush eyes with tepid water for 15 minutes. Seek immediate medical advice immediately.

Skin: Avoid skin contact with the liquid. Remove contaminated clothing and wash the exposed area with soap and water.

Frostbite: Obtain medical assistance. If medical assistance is not available immediately, place person in a warm area as soon as possible and allow the injured area to warm gradually. DO NOT WARM EXPOSED AREA TO EXCESS HEAT OR COLD.

Ingestion: Unlikely to be a problem, this should not occur.

SECTION 8 - SAFE HANDLING

Spills: Shut off ignition source and source of leak. Evacuate all non-essential personnel from the area. If possible, ventilate the area. Use water spray to disperse vapors. Isolate and ventilate area until gas has dispersed. If the incident is significant seek assistance from local fire, police and other relevant authorities.

Waste Disposal Method: Dispose of product in accordance with local, county state, and federal regulations.

Storage, Handling, Shipping: Store in a cool, well-ventilated area. Store away from strong oxidizing agents, chlorine dioxide, excessive heat and/or static discharge. Cylinders must be stored and transported in an upright position.

Other Precautions: Empty containers may contain flammable or combustible vapors. Do not reuse without adequate precautions.

SECTION 9 -PERSONAL PROTECTION

Engineering Controls: Use only in a well ventilated area! Ensure there is good ventilation. If additional ventilation is needed use auxiliary ventilation equipment ensuring that all systems are well grounded and spark proof.

Eyes: Wear safety chemical safety glasses with side shields and/or goggles.

Gloves: Use thermal, chemical resistant gloves when handling this product.

Other protective clothing: Long sleeves, pants and close-toed shoes.

Respiratory Protection: If ventilation of the area is not adequate use a NIOSH approved respirator to prevent overexposure by inhalation.

SECTION 10 – HEALTH EFFECTS

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Toxicology Test Data:

Rat, 3 month oral toxicity, dietary - @ 800 – 5000 ppm in diet
Body & organ weights, urine affected
Dog, 90 day oral toxicity - @ 25 – 250 mg/kg/day
No compound related adverse effects
Rat, Oral 2-Gen reproduction study – NOAEL: 160 mg/kg/day
Reduced fertility & pup survival @ 500
Rat, Inhalation developmental/Repro test – 10, 50, 116 ppm
No reproduction effects; smaller pups @ 116 ppm
Screening test for oral toxicity –
Moderate to low toxicity
Screening test for inhalation toxicity –
Saturated vapor not lethal to 5 species tested
Rat, 28 day oral study – 250 – 2000 ul/kg
Testicular effects in highest dose group
Rat, 6 week inhalation study (vapor) – Sat @ 25 c
Intense yellow urine, nasal discharge
Rat, 2 week (10 dose) inhalation study – 6 hr/day @ 1 mg/l
No significant difference from control
Rat, 2 week (10 dose) inhalation study – 6 hr/day @ 1 mg/l
No deaths occurred
Rat, 2 week (10 dose) inhalation study – 6 hr/day @ 1 mg/l
No deaths occurred
Rat, 2 week (10 dose) inhalation study – 6 hr/day @ 1 mg/l
No deaths occurred
Rat, 2 week (10 dose) inhalation study – 6 hr/day @ 1 mg/l
80% deaths with Coarse particle aerosol

SECTION 11 – REGULATORY INFORMATION

TSCA Inventory Status
Listed on Inventory: Yes

SARA – 313 Listed Chemicals: CAS: 872-50-4 NAME: N-Methylpyrrolidone
CAS: 75-09-2 NAME: Methylene Chloride

RCRA Haz.: Waste No: **CERCLA:** NO **Reportable Qty: (If Yes)**
NMP is subject to the reporting requirements of SARA Title III, Section 313 and 40CFR372.

State Regulatory Information:	**(By Component)**	**NJ/PA/MA RTK**
CAS:	872-50-4	NO
NAME:	M-Methylpyrrolidone	
CAS:	75-09-02	NO
NAME:	Methylene Chloride	

Hazard Ratings:

	Health:	**Fire:**	**Reactivity:**	**Special:**
HMIS	2	2	0	NA
NFPA	2	2	0	NA

This product is hazardous or contains components which are hazardous according to the OSHA Hazard Communication Standard.

SECTION 12 -PREPARATION

Enviro-Safe Refrigerants, Inc., 400 Margaret, Pekin, IL 61554 Telephone: 309-346-1110 December 1, 2004
Revised August 16, 2011

All information provided for this MSDS sheet by Enviro-Safe Refrigerants, Inc. is offered in good faith and is believed to be accurate to the best knowledge of the preparation analyst. The information contained in this document is based on documentation provided by the supplier and other documentation/information available at the date of preparation. Enviro-Safe does not guarantee the accuracy of this document and this information is offered without warranty, guarantee or liability on the part of the preparation analyst in good faith.