



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**PRODUCT NAME:** RA5 SERIES  
**OTHER/GENERIC NAMES:** Polyol Ester (POE) Refrigeration Compressor Fluid; POE OIL; REFRIGERANT OIL  
**PRODUCT USE:** Lubricant; Refrigeration Compressor Lubricant  
**EXIM TRADING LLC** 12601 NW 115<sup>TH</sup> Ave, Unit 111A, Medley, FL, 33178  
☎ (305) 884 7882 📠 (305) 884 7883

#### FOR EMERGENCY

Medical: 1-800-498-5701  
Transportation: Chemtrec 1-800-424-9300  
OUTSIDE UNITED STATES, CALL COLLECT 1-352-323-3500

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Description** This product does not contain any substances classified as hazardous to health

| Component Name | CAS Number | % (w/w) | OSHA PEL           | ACGIH TLV         |
|----------------|------------|---------|--------------------|-------------------|
| Polyol ester   | ---        | ---     | No PEL established | No TL established |

Ingredients not precisely identified are proprietary or nonhazardous.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW:

**COLOR:** Clear

**PHYSICAL FORM:** Liquid

**ODOR:** Ester-Like

**MAJOR HEALTH HAZARDS:** EXCESSIVE INHALATION EXPOSURE MAY CAUSE IRRITATION OF RESPIRATORY PASSAGES. MAY BE HARMFUL IF SWALLOWED. INHALATION OR INGESTION MAY CAUSE MUCOUS MEMBRANE IRRITATION

**PRECAUTIONARY STATEMENTS:** Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Keep container tightly closed. Wash thoroughly after handling. Use only with adequate ventilation.



## MSDS RA-5 SERIES MSDS POE SERIES

### POTENTIAL HEALTH EFFECTS:

#### Routes of Exposure

- EYE CONTACT:** Eye contact May cause eye irritation.
- SKIN CONTACT:** Short contact periods with human skin are not usually associated with skin irritation. Repeated and/or prolonged contact may cause irritation. No toxic effects are expected if absorbed through the skin.
- INHALATION:** This material may cause irritation following inhalation. No toxic effects are known to be associated with inhalation of this material.
- INGESTION:** In humans, irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. May be harmful if swallowed.
- OTHER:** Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

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### 4. FIRST AID MEASURES

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- Skin contact** Wash affected areas thoroughly with soap and water. Wash contaminated clothing before reuse. If redness, itching, or a burning sensation develops, get medical attention.
- Eye contact** Flush with clean, lukewarm water (low pressure) occasionally lifting eyelids for at least 15 minutes. If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.
- Inhalation** Avoid breathing oil mists. Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given by qualified personnel if breathing is difficult. Get medical attention.
- Ingestion** DO NOT INDUCE VOMITING. Fluid has laxative effect. Give one or two glasses of water to drink and refer to medical personnel. Never give anything by mouth to an unconscious person.

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### 5. FIRE FIGHTING MEASURES

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- EXTINGUISHING MEDIA:** For small fires: Carbon dioxide (CO<sub>2</sub>) Dry chemical, Foam, Water spray.
- FIRE HAZARDS:** LOW FIRE HAZARD - Do not cut, drill, or weld empty containers
- PROTECTIVE EQUIPMENT:** A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.

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### 6. ACCIDENTAL RELEASE MEASURES

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- PERSONAL PRECAUTIONS:** Ensure adequate ventilation of the working area.
- ENVIRONMENTAL PRECAUTIONS:** Do not allow product to enter drains. Prevent further spillage if safe.



## MSDS RA-5 SERIES MSDS POE SERIES

**CLEAN UP METHOD:** Absorb with inert, absorbent material and shovel into a chemical waste container. Transfer to suitable, labeled containers for disposal. Clean spillage area thoroughly with plenty of water containing detergent and flush to a sewer serviced by a permitted wastewater treatment facility.

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### 7. HANDLING AND STORAGE

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**NORMAL HANDLING:** (Always wear recommended personal protective equipment)  
Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.

**STORAGE RECOMMENDATIONS:**  
Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labeled containers. Store at a maximum temperature of 40°C

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**ENGINEERING MEASURES:** Ensure adequate ventilation of the working area.  
**OCCUPATIONAL EXPOSURE CONTROLS:** Keep away from food, drink and animal feed.  
**RESPIRATORY PROTECTION:** Normally not necessary. If mist is generated, wear approved organic vapor respirator suitable for oil mist areas with sufficient oxygen.  
**SKIN/HAND PROTECTION:** Normally none required, for direct contact of more than 2 hours, PVC, Viton, or Nitrile gloves are recommended.  
**EYE PROTECTION:** Normally none required, chemical goggles if splashing is likely or high pressure systems are used.  
**VENTILATION:** General ventilation  
**EXPOSURE LIMITS:** Acute LD<sub>50</sub> > 5000 mg/Kg (rat, oral). Practically non-toxic  
**PROTECTIVE EQUIPMENT:** Protect clothing from contact with the product.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

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#### GENERAL PROPERTIES

**DESCRIPTION:** Liquid  
**COLOR:** Slight yellow tint  
**ODOR:** Very slight hydrocarbon order  
**BOILING POINT:** NA  
**FLASH POINT:** 520°F  
**VAPOR PRESSURE:** <0.01 mmHg @ 20°C  
**VAPOR DENSITY:** No test data available  
**VOC:** Negligible



## MSDS RA-5 SERIES MSDS POE SERIES

**SPECIFIC GRAVITY:** 0.85 - 0.95  
**VOLATILITIES, % VOLUME:** 0%  
**SOLUBILITY IN WATER:** Negligible  
**EVAPORATION RATE:** Nil

### SPECIFIC PROPERTIES

| Lubrication Properties  | RA5-32 | RA5-46 | RA5-68 | RA5-100 | RA5-150 | RA5-220 |
|-------------------------|--------|--------|--------|---------|---------|---------|
| Vis cSt @ 40 °C         | 32.5   | 45.6   | 68.7   | 98.8    | 148     | 221     |
| Vis cSt @ 100 °C        | 5.8    | 7.3    | 9.8    | 12.5    | 17.2    | 25.1    |
| Viscosity Index         | 121    | 123    | 124    | 120     | 126     | 143     |
| Pour Point °F           | -52    | -50    | -46    | -38     | -33     | -28     |
| Flash Point °F          | 440    | 450    | 475    | 520     | 522     | 525     |
| Copper Corrosion, 24 Hr | 1a     | 1a     | 1a     | 1a      | 1a      | 1a      |

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### 10. STABILITY AND REACTIVITY

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**STABILITY:** Stable under normal conditions.  
**HAZARDOUS POLYMERIZATION:** Will not occur  
**MATERIALS TO AVOID:** Strong oxidizing agents.  
**DECOMPOSITION PRODUCTS:** Analogous compounds evolve, carbon monoxide, carbon dioxide, and other undefined fragments.

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### 11. TOXICOLOGICAL INFORMATION

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**ACUTE TOXICITY** Acute LD<sub>50</sub> > 5,000 mg / Kg (rat : oral) PRACTICALLY NON TOXIC.  
Negative when tested by modified Ames test for carcinogenicity.

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### 12. ECOLOGICAL INFORMATION

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**ECOTOXICITY:** No data is available on this product

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### 13. DISPOSAL CONSIDERATIONS

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**GENERAL INFORMATION** Dispose of in compliance with all local and national regulations.  
**CONTAINER DISPOSAL** Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residues from container and puncture or otherwise destroy empty container before disposal.



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## 14. TRANSPORT INFORMATION

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**TECHNICAL NAME** Ester made of TRIMETHYLOLPROPANE @ 50% and PELARGONIC ACID @ 50%  
**D.O.T. HAZARD CLASS** Not regulated  
**U.N. N.A. #** Not regulated  
**PRODUCT LABEL** FA5-100, Polyol Ester

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## 15. REGULATORY INFORMATION

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**RISK PHRASES** NSH - No Significant Hazard.  
**OSHA STATUS** Non Hazardous under 29 CFR 1910.1200  
**TSCA STATUS** N/A  
**RCRA STATUS** If discarded in its purchased form this product would not be a hazardous waste either by listing or characteristic. However it is the responsibility of the product user to determine at the time of disposal, whether the material being disposed of is a hazardous waste (40 CFR 261.20-24).  
**CALIFORNIA PROP 65** This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

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## 16. OTHER INFORMATION

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|                            | <b>Health Hazard</b> | <b>Flammability</b> | <b>Physical Hazard</b> | <b>Instability</b> |
|----------------------------|----------------------|---------------------|------------------------|--------------------|
| <b>HMIS Classification</b> | 1                    | 1                   | 0                      |                    |

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