



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Company Name</b> Nu-Calgon Wholesaler, Inc.	<b>Phone Number</b> (314) 469-7000 / (800) 554-5499	<b>CHEMTREC</b> (800) 424-9300		
<b>Street Address</b> 2008 Altom Court	<b>City</b> St. Louis	<b>State</b> MO	<b>Postal Code</b> 63146-4151	<b>Last Update</b> 9/13/07
<b>Product Name</b> Emkarate RL 68HB	<b>Product Number</b> 4316-85	<b>Product Use</b> Refrigerant Lubricant		<b>EPA Registration #</b> N/A

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<b>Hazardous Ingredients</b>	<b>% By Wt.</b>	<b>CAS Number</b>	<b>TLV</b>	<b>PEL</b>
Polyol ester			No TLV established	No PEL established
Tricresyl phosphate (<1% ortho isomer)		1330-78-5	No TLV established	No PEL established

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** Color clear, Form Liquid, Odor No data. INHALATION OR INGESTION MAY CAUSE MUCOUS MEMBRANE IRRITATION. MAY BE HARMFUL IF SWALLOWED. EXCESSIVE INHALATION EXPOSURE MAY CAUSE IRRITATION OF RESPIRATORY PASSAGES. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE EYE IRRITATION. REPEATED/PROLONGED CONTACT MAY CAUSE SKIN IRRITATION. No toxicity information is available on this specific preparation; this health hazard assessment is based on information that is available on the properties of its components. Routes of Exposure Eye contact Skin contact Inhalation

### Potential Health Effects

**Eyes:** May cause eye irritation in man.

**Skin:** Short contact periods with human skin are not usually associated with skin irritation. Prolonged contact can result in slight skin irritation. Repeated contact can result in slight skin irritation. This material may be harmful if absorbed through the skin.

**Ingestion:** In humans, irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. May be harmful if swallowed.

**Inhalation:** This material may cause irritation following inhalation. No toxic effects are known to be associated with inhalation of this material.

**Chronic Exposure:** No Data.

**Carcinogenicity:** No Data.

**Medical Conditions Aggravated by Exposure:** No Data.

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.

**Skin:** Wash material off of the skin with soap and plenty of water. Get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

**Ingestion:** DO NOT INDUCE VOMITING. Give one or two glasses of water to drink and refer to medical personnel or take direction from either a physician or a poison control center. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** Estimated > 93 (closed cup)°C/Estimated > 200 (closed cup)°F

**Autoignition Temp:** No data.°C/No data.°F

**Hazardous Products of Combustion:** No Data.

**Flammable Limits in Air:** No data.

**Extinguishing Media:** Water fog, alcohol foam, carbon dioxide, dry chemical.

**Fire and Explosion Hazards:** None known.

**Special Firefighting Procedures:** A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Contain spill. Soak up material with absorbent and shovel into a chemical waste container. Wash residue from spill area with water containing detergent and flush to a sewer serviced by a permitted wastewater treatment facility.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Prevent eye contact. Prevent skin contact. Avoid breathing this material. Do not swallow.

**Storage Requirements:** Store in original containers.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** Respiratory protection is not normally needed if controls are adequate.

**Eye Protection:** Chemical tight goggles.

**Protective Clothing:** Impervious gloves.

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** Provide adequate ventilation. Eyewash station in work area.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical Form:</b> Liquid	<b>Freezing Point:</b> No data.°C/No data.°F	<b>% Volatile by Weight:</b> No Data.%
<b>Color:</b> clear	<b>Vapor Density [air =1]:</b> No Data.	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> No data.	<b>Vapor Pressure:</b> No Data.	<b>Specific Gravity:</b> No Data.
<b>Boiling Point:</b> No data.°C/No data.°F	<b>Solubility in Water:</b> Insoluble	<b>pH (concentrate):</b> No data.

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal conditions.

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Strong oxidizing agents.

**Reactive Conditions to avoid:** None known.

**Decomposition Products:** Carbon dioxide, carbon monoxide. Phosphorus oxides.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient (Specify Species)</b>	<b>LC50 of Ingredient (Specify Species)</b>
No data available on this material.				

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
No data available on this material.	

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Disposal should be in accordance with local, state or national legislation.

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 residue from container and puncture or otherwise destroy empty container before disposal.

## SECTION 14 – TRANSPORTATION INFORMATION

**Special Shipping Information:** Not regulated.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	Not regulated.			
<b>IMO</b> (Water)	Not regulated.			
<b>ICAO</b> (Air)	Not regulated.			

## SECTION 15 – REGULATORY INFORMATION

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	Noncontrolled (Nonhazardous).
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	SARA 311/312 Hazard Categories: Immediate Y / Delayed N / Fire N / Pressure N / Reactivity N
<b>OSHA:</b> (Occupational Safety & Health Administration)	OSHA Hazard Communication Standard, 29 CFR 1910.1200, Hazard Summary: Health Hazards: Irritant (eye) / Physical Hazards: None
<b>TSCA:</b> (Toxic Substance Control Act)	Compliant.
<b>VOC:</b> (volatile Organic Compounds)	No Data.
<b>CPR:</b> (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
<b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)	Compliant.
<b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
<b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)	No Data.
<b>IDL:</b> (Canadian Ingredient Disclosure List)	No Data.
<b>HFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health 1 Flammability 1 Physical Hazards 0 Instability 0

## SECTION 16 – OTHER INFORMATION

New Jersey Hazardous Substances Tricresylphosphate

Kinematic viscosity(40°C ) (mm<sup>2</sup>/S) 72.0

Kinematic viscosity (mm<sup>2</sup>/s) 9.7 @ 100°C

Density (g/ml) 0.977 @ 20 °C

This product contains tricresyl phosphate (TCP <1% ortho isomer). This material was shown to have adverse reproductive effects in rats and mice. Administration of 0.1% or greater TCP in the diet of male and female mice resulted in impaired fertility in both sexes. There were dose-related hisopathological effects on testes and adrenals. Sperm motility was reduced at dietary levels as low as 0.05%. Tests on male rats showed dose-dependent increase in abnormal sperm morphology in rats given 100 mg/kg and 200 mg/kg in the diet.

Australia (AICS) Compliant.

Japan (ENCS) Compliant.

China (IECSC) Compliant.

Korea (ECL) Compliant.

Philippines (PICCS) Compliant.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.