



# 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> 10/8/12
<b>Product Name</b> EMKARATE RL 22H	<b>Product Number</b> 4313-46	<b>Product Use</b> Refrigeration oil		<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	>99	No Data.	No TLV est.	No PEL est.
antioxidant	<1	No Data.	No TLV est.	No PEL est.

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** Color: pale yellow ; Form: Liquid ; Odor: mild odor. INHALATION OR INGESTION MAY CAUSE MUCOUS MEMBRANE IRRITATION. EXCESSIVE INHALATION EXPOSURE MAY CAUSE IRRITATION OF RESPIRATORY PASSAGES. MAY CAUSE SLIGHT SKIN IRRITATION. REPEATED/PROLONGED CONTACT MAY CAUSE SLIGHT SKIN IRRITATION. This health hazard assessment is based on information available on the components of the formulation and tests on the product. Routes of Exposure: Eye contact Skin contact Inhalation

### Potential Health Effects

**Eyes:** No irritation is likely to develop following contact with human eyes.

**Skin:** May cause skin irritation. Prolonged contact can result in slight skin irritation. Repeated contact can result in slight skin irritation. No toxic effects are expected if absorbed through the skin.

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

**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:** Short term tests and a consideration of the structure have shown that it is unlikely to be a carcinogenic hazard to man.

**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 burning sensation develops, have eyes examined and treated by medical personnel.

**Skin:** Wash material off of the skin with plenty of soap and water. If redness, itching, or burning sensation develops, get medical attention.

**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:** 210°C / 410°F

**Autoignition Temp:** 390°C/734°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. Refer to section 8 for proper personal protective equipment.

## SECTION 7 – HANDLING AND STORAGE

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

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

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

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

**Eye Protection:** Safety glasses with side shields.

**Protective Clothing:** Impervious gloves.

**Exposure Guidelines:** No OSHA PEL or ACGIH TLV assigned. Minimize exposure in accordance with good hygiene practice.

**Specific Engineering Controls (such as ventilation, enclosed process):** Provide adequate ventilation. Eye wash and safety shower easily accessible to the 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> pale yellow	<b>Vapor Density [air =1]:</b> No Data.	<b>Evaporation Rate:</b> No Data.
<b>Odor:</b> Mild odor	<b>Vapor Pressure:</b> (mmHg) < 0.1	<b>Specific Gravity:</b> No Data.
<b>Boiling Point:</b> > 250°C/> 482°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:** No Data.

**Reactive Conditions to avoid:** Strong oxidizing agents.

**Decomposition Products:** None Known.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>LD 50 of Ingredient</b> (Specify Species)	<b>LC50 of Ingredient</b> (Specify Species)
Rabbit Draize 72 hours Nonirritating. 24 June 1993				
Mouse Local Lymph Node Assay Unlikely to cause skin sensitisation. 28 June 1993				

## SECTION 12 – ECOLOGICAL INFORMATION

<b>Hazardous Ingredients</b>	<b>Aquatic Toxicity Data</b>
The product is essentially insoluble in water. (OECD 301B) (28 days)75.7%	
This product is partially biodegradable in water. Expected to be of low toxicity to aquatic life.	
This product is partially removed in biological treatment processes.	

## 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 by DOT or TDG. Not classified in RID/ADR - ADNR - IMDG - ICTA/IATA-DGR.

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
<b>DOT</b> (Land)	No Data.	No Data.	No Data.	No Data.
<b>IMO</b> (Water)	No Data.	No Data.	No Data.	No Data.
<b>ICAO</b> (Air)	No Data.	No Data.	No Data.	No Data.

## SECTION 15 – REGULATORY INFORMATION

<b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)	Noncontrolled (Nonhazardous).
<b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)	No for Immediate, Delayed, Fire, Pressure, and Reactivity. No 313-listed chemicals in this product.
<b>OSHA:</b> (Occupational Safety & Health Administration)	Health Hazards: None 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>NFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)	Health 1; Flammability 1; Physical Hazards 0; Instability 0.

## SECTION 16 – OTHER INFORMATION

Kinematic viscosity(40°C)(mm<sup>2</sup>/S): 18.9; Kinematic viscosity (mm<sup>2</sup>/S): 4.2 cSt @ 100 deg. C; Density (g/ml): 0.9938 @ 20 °C; Pour Point (C°): -52.

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