



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name Nu-Calgon Wholesaler, Inc.	Phone Number (314) 469-7000 / (800) 554-5499	CHEMTREC (800) 424-9300		
Street Address 2008 Altom Court	City St. Louis	State MO	Postal Code 63146-4151	Last Update 10/2/09
Product Name EMKARATE RL 22H	Product Number 4313-46	Product Use Refrigeration oil		EPA Registration # N/A

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
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

Physical Form: Liquid	Freezing Point: No Data. °C/No Data. °F	% Volatile by Weight: No Data. %
Color: pale yellow	Vapor Density [air =1]: No Data.	Evaporation Rate: No Data.
Odor: Mild odor	Vapor Pressure: (mmHg) < 0.1	Specific Gravity: No Data.
Boiling Point: > 250°C/> 482°F	Solubility in Water: Insoluble	pH (concentrate): 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

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (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

Hazardous Ingredients	Aquatic Toxicity Data
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>
DOT (Land)	No Data.	No Data.	No Data.	No Data.
IMO (Water)	No Data.	No Data.	No Data.	No Data.
ICAO (Air)	No Data.	No Data.	No Data.	No Data.

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	Noncontrolled (Nonhazardous).
SARA Title III: (Superfund Amendments & Reauthorization Act)	No for Immediate, Delayed, Fire, Pressure, and Reactivity. No 313-listed chemicals in this product.
OSHA: (Occupational Safety & Health Administration)	Health Hazards: None Physical Hazards: None
TSCA: (Toxic Substance Control Act)	Compliant.
VOC: (volatile Organic Compounds)	No Data.
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
EINECS: (European Inventory of Existing Commercial Chemical Substances)	Compliant.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
CERCLA: (Comprehensive Response Compensation & Liability Act)	No Data.
IDL: (Canadian Ingredient Disclosure List)	No Data.
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	Health 1; Flammability 1; Physical Hazards 0; Instability 0.

SECTION 16 – OTHER INFORMATION

Kinematic viscosity(40°C)(mm²/S): 18.9; Kinematic viscosity (mm²/S): 4.2 cSt @ 100 deg. C; Density (g/ml): 0.9938 @ 20 °C; Pour Point (C°): -52.

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.