



MATERIAL SAFETY DATA SHEET EMKARATE RL32HB

I - PRODUCT IDENTIFICATION

Company Name: Nu-Calgon Wholesaler, Inc.
Address: 2008 Altom Court, St. Louis, MO 63146-4151
Product Name: EMKARATE RL32HB
Synonyms: Refrigeration Oil

Tel No: (314) 469-7000, (800) 554-5499
CHEMTREC: (800) 424-9300
Product Number: 4314-HB

II - HAZARDOUS INGREDIENTS OF MIXTURES

<u>MATERIAL</u>	<u>CAS#</u>	<u>% By Wt</u>	<u>TLV</u>	<u>PEL</u>
Polyol Ester		97	N/A	N/A
Antioxidant		< 1	N/A	N/A
Tricresyl Phosphate (TCP cont. <1.0% ortho isomer)	1330-78-5	< 2	N/A	N/A

Ingredients not precisely identified are proprietary or nonhazardous. Values are not product specifications.

None of the ingredients are subject to the reporting requirements of SARA, Section 313.

All ingredients are TSCA listed.

III - PHYSICAL DATA

Vapor Pressure: No Data	Vapor Density (Air=1) 60-90° F: N/A
Evaporation Rate: N/A	VOC Content (% by wt.): N/A
Solubility in H₂O: <1%	pH @ N/A Solution: N/A
Freezing Point °F: N/A	pH as Distributed: N/A
Boiling Point °F: N/A	Appearance: pale yellow, clear liquid
Specific Gravity H₂O=1 @25° C: 0.977	Odor: mild odor

IV - FIRE AND EXPLOSION

Flash Point F: °C: 270 (open cup) **Flammable Limits:** No Data
Extinguishing Media: Water fog, foam, carbon dioxide, dry chemical. If water is used, use with care to avoid possible violent production of steam.
Special Fire Fighting Procedures: Self-contained breathing apparatus w/ full facepiece and protective clothing
Unusual Fire and Explosion Hazards: Low fire hazard. Unlikely to ignite except in high heat flux conditions. Thermal decomposition will evolve irritant vapors.

V - REACTIVITY DATA

Stability - Conditions to avoid: Stable under normal conditions.
Incompatibility: Strong oxidizing agents.
Hazardous Decomposition Products: Highly unlikely under intended handling and use. Combustion products: Carbon dioxide, carbon monoxide.
Conditions Contributing to Hazardous Polymerizations: Will not occur.

VI - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE (Medical Conditions Aggravated/Target Organ Effects),

A. ACUTE (Primary Route of Exposure) INHALATION: High concentrations of mist may be slightly irritating to the upper respiratory tract. Thermal decomposition will evolve irritant vapors. EYES: Unlikely to cause eye irritation. SKIN: Short contact periods with human skin are not usually associated with skin irritation; repeated and/or prolonged contact can result in skin irritation. Not a skin irritant per OSHA Hazard Communication standard, 29 CFR 1910.1200. INGESTION: Relative to other materials, this material is classified as "slightly toxic" by ingestion. In humans, irritation of the mouth, pharynx, esophagus and stomach may develop following ingestion of the product.

B. SUBCHRONIC, CHRONIC, OTHER: No other adverse clinical effects have been associated with exposures to this material. CARCINOGENICITY: The ingredients of this product are not classified as carcinogenic by ACGIH or IRAC, not regulated as carcinogens by OSHA and not listed as carcinogenic by NTP.

C. MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE : No other adverse clinical effects have been associated with exposures to this material.

VII - EMERGENCY AND FIRST AID PROCEDURES

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

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 plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

INGESTION: Do not induce vomiting. Wash out mouth with water and give 1 or 2 glasses of water to drink and refer person to medical personnel. (Never give anything by mouth to an unconscious person.)

VIII - SPILL OR LEAK PROCEDURE

Spill Management: Wear skin and eye protection during cleanup. Contain spill. Keep out of sewers and drains. Contain and soak up material with inert, non-flammable absorbent such as sand or dirt. Shovel into a chemical waste container for disposal or recovery.

Waste Disposal Methods : Discarded product is not a hazardous waste under RCRA, 40 CFR 261. 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.

IX - PROTECTION INFORMATION/CONTROL MEASURES

Respiratory: Use MSHA-NIOSH approved respirator for organic vapors, dusts and mists whole TLV is greater than 0.05 mg/m³.

Eye Protection: Chemical-tight glasses. **Glove:** impervious gloves and apron.

Other Clothing and Equipment : Eyewash station and safety shower in work area.

Ventilation: Use ventilation adequate to maintain safe levels.

X - SPECIAL PRECAUTIONS

Precautions to be taken in Handling and Storing : Prevent skin and eye contact. Avoid inhalation of high concentrations of mists or vapors.

Additional Information :

NFPA

Health Hazard.....: 1

Fire Hazard.....: 1

Reactivity.....: 0

Specific Hazard...:

HMIS RATING

Health Hazard.....: 1

Fire Hazard.....: 1

Reactivity.....: 0

Personal Protection...: X (Sec. 9)

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