



MATERIAL SAFETY DATA SHEET EMKARATE RL 32CF

I - PRODUCT IDENTIFICATION

Company Name: Nu-Calgon Wholesaler, Inc.
Address: 2008 Altom Court, St. Louis, MO 63146-4151
Product Name: EMKARATE RL 32CF
Synonyms: Refrigeration Oil

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

II - HAZARDOUS INGREDIENTS OF MIXTURES

<u>MATERIAL</u>	<u>CAS#</u>	<u>% By Wt</u>	<u>TLV</u>	<u>PEL</u>
Polyol Ester		>99	N/A	N/A
Additives		<1	N/A	N/A

Ingredients not precisely identified are proprietary or nonhazardous. Values are not product specifications.
All ingredients are TSCA listed.

III - PHYSICAL DATA

Vapor Pressure: (mm Hg at 20 ° C): <10
Evaporation Rate:
Solubility in H₂O: <1%
Freezing Point °F:
Boiling Point °F: 572
Specific Gravity H₂O=1 @25° C: 0.972

Vapor Density (Air=1) 60-90° F: No data
VOC Content (% by wt.): No data
pH @ Solution: No data
pH as Distributed: No data
Appearance: Liquid
Odor: Mild Odor

IV - FIRE AND EXPLOSION

Flash Point F: 490 ° F, 254 ° C (COC) **Flammable Limits:** (STP)No data
Extinguishing Media: Water fog, foam, carbon dioxide, dry chemical, halogenated agents
Special Fire Fighting Procedures: Self-contained breathing apparatus with full face piece and protective clothing.
Unusual Fire and Explosion Hazards: None known

V - REACTIVITY DATA

Stability - Conditions to avoid: Stable under normal conditions.
Incompatibility: Oxidizing agents
Hazardous Decomposition Products: 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: No toxic effects are known to be associated with inhalation of vapors from this material. High concentrations of mist may be slightly irritating to the upper respiratory tract. Thermal decomposition will evolve irritant vapors. **Ingestion:** The acute oral LD50 in rat is probably above 2,000 mg/kg. Relative to other materials, this material is classified as "slightly toxic" by ingestion. **Eyes:** No irritation is likely to develop following contact with human eyes. **Skin:** Short contact periods with human skin are not usually associated with skin irritation; repeated and/or prolonged contact may result in mild skin irritation. This product will probably not be absorbed through human skin.
B. SUBCHRONIC, CHRONIC, OTHER: No other adverse clinical effects have been associated with exposures to this material. Short term tests and a consideration of the structure indicate that this substance is unlikely to be a carcinogenic hazard to humans
C. MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

VII - EMERGENCY AND FIRST AID PROCEDURES

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

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 and decontaminate footwear before reuse.

INGESTION: Do not induce vomiting. 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 protection during cleanup. Contain spill. Keep out of sewers and drains. Soak up material with absorbent and shovel into a chemical waste container.

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.

Ecological Information: Persistence and degradation: The product is substantially biodegradable in water

IX - PROTECTION INFORMATION/CONTROL MEASURES

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

Eye Protection: Chemical tight goggles **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 contact. Avoid inhalation of high concentrations of mists.

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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