



EMKARATE RL® 32-3MAF

Material Safety Data Sheet

Date Revised: Feb, 2008

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name EMKARATE RL 32-3MAF
Product Use Lubricant
Address/Telephone number Lubrizol
CPI Engineering Services, Inc
2300 James Savage Rd.
Midland, MI 48642

Phone: 989-496-3780
Fax: 989-496-0316

Emergency Telephone Numbers USA – Chemtrec: 800-424-9300
Europe – NCEC: +44 (0)208-762-8322
All Others – Chemtrec: +1-703-527-3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	% (w/w)	OSHA PEL	ACGIH TLV
Polyol ester	---	>99	No PEL established	No TLV established
Additives	---	<1	No PEL established	No TLV established

Ingredients not precisely identified are proprietary or nonhazardous.

Values are not product specifications.

3. HAZARDS IDENTIFICATION

Emergency Overview

Color Clear & yellow
Form Liquid
Odor No data.

INHALATION OR INGESTION MAY CAUSE MUCOUS MEMBRANE IRRITATION.

MAY CAUSE EYE IRRITATION

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REPEATED/PROLONGED CONTACT MAY CAUSE SKIN IRRITATION.

Routes of Exposure: Eye contact, Skin contact, Inhalation

Eye contact	May cause eye irritation in man.
Skin contact	Short contact periods with human skin are not usually associated with skin irritation. Repeated contact can result in slight skin irritation. Prolonged contact can result in slight skin irritation. Systemically toxic concentrations of this product will probably not be absorbed through human skin.
Inhalation	High concentrations of mists or aerosols may irritate respiratory passages. No toxic effects are known to be associated with inhalation of this material.
Ingestion	In humans, irritation of the mouth, pharynx and esophagus can develop following ingestion of this product. No toxic effects are expected following ingestion of this product.
Other	Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

4. FIRST AID MEASURES

Eye contact	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 contact	Wash material off of the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention.
Inhalation	Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.
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.

5. FIRE-FIGHTING MEASURES

Flash Point (°F)	>392
Flash Point (°C)	>200
Autoignition Temperature (°F)	No data.
Autoignition Temperature (°C)	No data.
Flammable Limits	No data.

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Extinguishing Media	Water fog, alcohol foam, carbon dioxide, dry chemical.
Special fire-fighting protective equipment	A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.
Fire and explosion hazards	None known.
Explosion data	
Sensitivity to mechanical impact	No data.
Sensitivity to static discharge	No data.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Refer to section 8 for proper personal protective equipment.
Steps to be taken in case material is released or spilled	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.

7. HANDLING AND STORAGE

Handling	Prevent eye contact. Prevent skin contact. Avoid breathing this material. Do not swallow.
Storage	50-70°F. Store in original containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

OSHA PEL

Component Name	Exposure limits	Notes
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No OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice.

ACGIH TLV

Component Name	Exposure limits	Notes
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No ACGIH TLV assigned. Minimize exposure in accordance with good hygiene practice.

Engineering controls

Eye protection

Protective clothing

Respiratory protection

Provide adequate ventilation.

Chemical tight goggles.

Impervious gloves.

Respiratory protection is not normally needed if controls are adequate.

Other

Eyewash and safety shower easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color	Clear & yellow
Form	Liquid
Odor	No data.
pH	No data.
Boiling Point (°F)	No data.
Boiling Point (°C)	No data.
Flash Point (°F)	>392
Flash Point (°C)	>200
Autoignition Temperature (°F)	No data.
Autoignition Temperature (°C)	No data.
Flammable Limits	No data.
Explosive Properties	No data.
Oxidizing Properties	No data.
Specific Gravity	~1
Solubility (water)	Insoluble
Solubility (other)	No data.
Partition Coefficient	No data.

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Materials to avoid	Strong oxidizing agents.
Conditions to avoid	None known.
Hazardous decomposition products	Carbon dioxide, carbon monoxide.
Hazardous polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

No data available on this material.

Toxicologically synergistic products	None known.
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12. ECOLOGICAL INFORMATION

No data is available on this product.

13. DISPOSAL CONSIDERATIONS

RCRA (Resource Conservation and Recovery Act) Classification:

Specifically Listed Not applicable.

Wastes

Characteristic Wastes **Ignitability** Not applicable.

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	Corrosivity	Not applicable.
	Reactivity	Not applicable.
	Toxicity	Not applicable.
Disposal method		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.

14. TRANSPORT INFORMATION

Department of Transportation: Not regulated.

TDG (Transportation of Dangerous Goods): Not regulated.

Not classified in RID/ADR - ADNR - IMDG - ICAO/IATA-DGR.

15. REGULATORY INFORMATION

Inventory Status

USA (TSCA)	Compliant.
OSHA Hazard Communication Standard, 29 CFR 1910.1200, Hazard Summary:	
Health Hazards	None
Physical Hazards	None
WHMIS Classification	Noncontrolled (Nonhazardous)
CERCLA and SARA Regulations (40 CFR 355, 370, and 372):	
This material contains the following chemicals subject to the reporting requirements of SARA 313:	No 313-listed chemicals in this product
SARA 311/312 Hazard Categories:	
Immediate	N
Delayed	N
Fire	N
Pressure	N
Reactivity	N

16. OTHER INFORMATION

We assigned NFPA ratings and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.

HMIS Information	
Health	1
Flammability	1
Physical Hazards	0

The HMIS ratings displayed above are from the HMIS III Third Edition. There have been significant changes made to the system. "Physical hazard" stands for physical hazard as defined in the OSHA Hazard Communication Standard and replaces the former code for reactivity. For a more detailed explanation of the system and the ratings, please contact our Product Safety and Regulatory Affairs group.

NFPA Information	
Health	1
Flammability	1
Instability	0

This information is intended solely for the use of individuals trained in the particular hazard rating system.

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