



**EMKARATE® RL 68H**  
Material Safety Data Sheet  
Date Revised: Feb, 2008

---

## **1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name** EMKARATE RL 68H  
**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**

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

Ingredients not precisely identified are proprietary or nonhazardous.

Values are not product specifications.

---

## **3. HAZARDS IDENTIFICATION**

### **Emergency Overview**

<b>Color</b>	Straw
<b>Form</b>	Liquid
<b>Odor</b>	Mild odor

INHALATION OR INGESTION MAY CAUSE MUCOUS MEMBRANE IRRITATION.

EXCESSIVE INHALATION EXPOSURE MAY CAUSE IRRITATION OF RESPIRATORY PASSAGES.

**EMKARATE® RL 68H**  
Material Safety Data Sheet  
Date Revised: Feb, 2008

MAY CAUSE EYE IRRITATION

REPEATED/PROLONGED CONTACT MAY CAUSE SKIN IRRITATION.

No toxicity information is available on this specific preparation; this health hazard assessment is based on information that is available on similar preparations.

**Routes of Exposure:** Eye contact, Skin contact, Inhalation

<b>Eye contact</b>	No irritation is likely to develop following contact with human eyes.
<b>Skin contact</b>	May cause slight skin irritation. This product will probably not be absorbed through human skin.
<b>Inhalation</b>	This material may cause irritation following inhalation. No toxic effects are known to be associated with inhalation of this material.
<b>Ingestion</b>	In humans, irritation of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. No toxic effects are expected following ingestion of this product.
<b>Other</b>	Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

---

#### **4. FIRST AID MEASURES**

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

<b>Flash Point (°F)</b>	518 (open cup)
<b>Flash Point (°C)</b>	270 (open cup)
<b>Autoignition Temperature (°F)</b>	No data.
<b>Autoignition Temperature (°C)</b>	No data.
<b>Flammable Limits</b>	No data.

**EMKARATE® RL 68H**  
Material Safety Data Sheet  
Date Revised: Feb, 2008

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

---

## **6. ACCIDENTAL RELEASE MEASURES**

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

<b>Handling</b>	Prevent eye contact. Prevent skin contact. Avoid breathing this material. Do not swallow.
<b>Storage</b>	Store in original containers.

---

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Exposure limits**

#### **OSHA PEL**

##### **Component Name**

No OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice.

##### **Exposure limits**

##### **Notes**

#### **ACGIH TLV**

##### **Component Name**

No ACGIH TLV assigned. Minimize exposure in accordance with good hygiene practice.

##### **Exposure limits**

##### **Notes**

#### **Engineering controls**

Provide adequate ventilation.

#### **Eye protection**

Chemical tight goggles.

#### **Protective clothing**

Impervious gloves.

#### **Respiratory protection**

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**

<b>Color</b>	Straw
<b>Form</b>	Liquid
<b>Odor</b>	Mild odor
<b>pH</b>	No data.
<b>Boiling Point (°F)</b>	No data.
<b>Boiling Point (°C)</b>	No data.
<b>Flash Point (°F)</b>	518 (open cup)
<b>Flash Point (°C)</b>	270 (open cup)
<b>Autoignition Temperature (°F)</b>	No data.
<b>Autoignition Temperature (°C)</b>	No data.
<b>Flammable Limits</b>	No data.
<b>Explosive Properties</b>	Not applicable.
<b>Oxidizing Properties</b>	No data.
<b>Vapor Pressure (mmHg)</b>	No data.
<b>Specific Gravity</b>	0.977
<b>Solubility (water)</b>	Insoluble
<b>Solubility (other)</b>	No data.
<b>Partition Coefficient</b>	>3
<b>Kinematic viscosity (mm<sup>2</sup>/s)</b>	72.3 @ 40°C
<b>Kinematic viscosity (mm<sup>2</sup>/s)</b>	9.8 @ 100°C
<b>Density (g/ml)</b>	0.977 @ 15°C
<b>Pour Point (°F)</b>	-38.2
<b>Pour Point (°C)</b>	-39

---

## **10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under normal conditions.
<b>Materials to avoid</b>	Strong oxidizing agents.
<b>Conditions to avoid</b>	None known.
<b>Hazardous decomposition products</b>	None known.
<b>Hazardous polymerization</b>	Will not occur.

---

## **11. TOXICOLOGICAL INFORMATION**

No data available on this product.

<b>Toxicologically synergistic products</b>	None known.
---	-------------

---

## **12. ECOLOGICAL INFORMATION**

No data is available on this product.

<b>Environmental Fate &amp; Distribution</b>	The product is essentially insoluble in water.
<b>Persistence &amp; Degradation</b>	Biodegradability (OECD 301B) 52 %
<b>Toxicity</b>	EC50 (48 hour) (static) Daphnia magna >10 mg/l
<b>Effect on Effluent Treatment</b>	The product is partially removed in biological treatment processes.

---

### **13. DISPOSAL CONSIDERATIONS**

**RCRA (Resource Conservation and Recovery Act) Classification:**

<b>Specifically Listed Wastes</b>	Not applicable.
<b>Characteristic Wastes</b>	
<b>Ignitability</b>	Not applicable.
<b>Corrosivity</b>	Not applicable.
<b>Reactivity</b>	Not applicable.
<b>Toxicity</b>	Not applicable.

<b>Disposal method</b>	Disposal should be in accordance with local, state or national legislation.
<b>Container disposal</b>	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**

<b>EU (EINECS/ELINCS/NLP)</b>	Compliant.
<b>USA (TSCA)</b>	Compliant.
<b>Australia (AICS)</b>	Compliant.
<b>Japan (ENCS)</b>	Compliant.
<b>China (IECSC)</b>	Compliant.
<b>Korea (ECL)</b>	Compliant.
<b>Philippines (PICCS)</b>	Compliant.

**OSHA Hazard Communication Standard,  
29 CFR 1910.1200, Hazard Summary:**

<b>Health Hazards</b>	None
<b>Physical Hazards</b>	None

**WHMIS Classification** Noncontrolled (Nonhazardous).

**EMKARATE® RL 68H**  
 Material Safety Data Sheet  
 Date Revised: Feb, 2008

**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:**

<b>Immediate</b>	N
<b>Delayed</b>	N
<b>Fire</b>	N
<b>Pressure</b>	N
<b>Reactivity</b>	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.

<b>HMIS Information</b>	
<b>Health</b>	1
<b>Flammability</b>	1
<b>Physical Hazards</b>	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.

<b>NFPA Information</b>	
<b>Health</b>	1
<b>Flammability</b>	1
<b>Instability</b>	0

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

*The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of The Lubrizol Corporation's knowledge; however, The Lubrizol Corporation makes no warranty whatsoever, expressed or implied of MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, regarding the accuracy of such data or the results to be obtained from use thereof. The Lubrizol Corporation assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.*

*Emkarate® is a registered trademark of The Lubrizol Corporation.*