



Prepared according to Annex II of EC Regulation 1907/2006.

<b>1</b>	<b>Substance/Product Identification</b>
<b>Product Trade Name</b>	<b>EMKARATE RL 68H</b>
<b>Company</b>	<i>CPI Engineering Services 2300 James Savage Rd. Midland, MI 48642 Phone: 989-496-3780 Fax: 989-496-0316</i>
<b>E-mail contact</b>	EUSDS@lubrizol.com
<b>CAS Number</b>	Not applicable for mixtures.
<b>Synonyms</b>	None.
<b>Preparation/Revision Date</b>	20 January 2010
<b>Generic Chemical Name</b>	Mixture.
<b>Product Type</b>	Refrigeration Lubricants.
<b>Emergency Phone Number</b>	FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
<b>MSDS No.</b>	19558291-2224661-1050021-102103
<b>2</b>	<b>Hazards Identification</b>
<b>Symbol(s)</b>	Not applicable.
<b>Product Classification</b>	Not applicable.
<b>3</b>	<b>Composition/Information on Ingredients</b>
<b>Hazardous Ingredients</b>	
This material contains no ingredients requiring disclosure under regulatory hazard criteria for this jurisdiction. See Section 11 for additional details.	
<b>4</b>	<b>First Aid Measures</b>
<b>Ingestion</b>	DO NOT INDUCE VOMITING. Get immediate medical attention.
<b>Eyes</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
<b>Skin</b>	Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.
<b>Inhalation</b>	Remove exposed person to fresh air if adverse effects are observed.
<b>Additional Information</b>	Note to physician: Treat symptomatically.
<b>5</b>	<b>Fire Fighting Measures</b>
<b>Flash Point</b>	> 270 °C, 518 °F COC (Typical)
<b>Extinguishing Media</b>	CO <sub>2</sub> , dry chemical, or foam. Water can be used to cool and protect exposed material.
<b>Firefighting Procedures</b>	Recommend wearing self-contained breathing apparatus.
<b>Unusual Fire &amp; Explosion Hazards</b>	None known.
<b>6</b>	<b>Accidental Release Measures</b>
<b>Spill Procedures</b>	Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.
<b>7</b>	<b>Handling and Storage</b>
<b>Pumping Temperature</b>	Not determined.
<b>Maximum Handling Temperature</b>	Not determined.
<b>Handling Procedures</b>	Use with adequate ventilation. Keep containers closed when not in use. Avoid skin contact. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of product.
<b>Maximum Storage Temperature</b>	Not determined.
<b>Storage Procedures</b>	Keep only in original container.

**EMKARATE RL 68H**

Loading Temperature

Not determined.

<b>8</b>	<b>Exposure Controls/Personal Protection</b>
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**Exposure Limits**

**EU**  
Not applicable.

**UK**  
Not applicable.

**Ireland**  
Not applicable.

**India**  
Not applicable.

**Cyprus**  
Not applicable.

**Other Exposure Limits**

None known.

**Engineering Controls**

Use with adequate ventilation.

**Hand Protection**

Neoprene.

**Eye Protection**

Safety Glasses.

**Respiratory Protection**

Use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

**Clothing Recommendation**

Long sleeve shirt is recommended. Launder contaminated clothing before reuse.

<b>9</b>	<b>Physical and Chemical Properties</b>
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**Flash Point**

&gt; 270 °C, 518 °F COC (Typical)

**Upper Flammable Limit**

Not determined.

**Lower Flammable Limit**

Not determined.

**Autoignition Point**

Not determined.

**Explosion Data**

Material does not have explosive properties.

**Vapour Pressure**

Not determined.

**pH**

Not determined.

**Specific Gravity**

0.98 (20 °C)

**Bulk Density**

Not determined.

**Water Solubility**

Insoluble.

**Percent Solid**

Not determined.

**Percent Volatile**

Not determined.

**Volatile Organic Compound**

Not determined.

**Vapour Density**

Not determined.

**Evaporation Rate**

Not determined.

**Odour**

Mild

**Appearance**

Clear to yellow liquid.

**Viscosity**

~ 72.3 Centistokes (72 °C)  
~ 9.8 Centistokes (100 °C)

**Odour Threshold**

Not determined.

**Boiling Point**

Not determined.

**Pour Point Temperature**

~ -39 °C, ~ -38 °F

**Melting / Freezing Point**

Not determined.

*The above data are typical values and do not constitute a specification.*

<b>10</b>	<b>Stability and Reactivity</b>
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**Stability**

Material is normally stable at moderately elevated temperatures and pressures.

**Decomposition Temperature**

Not determined.

**Incompatibility**

Strong acids. Strong bases. Strong oxidizing agents.

**Polymerization**

Will not occur.

**Thermal Decomposition**

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

**-- ACUTE EXPOSURE --**

<b>Eye Irritation</b>	May cause eye irritation. Does not meet Canadian D2B or EU R36 criteria. Based on data from components or similar materials.
<b>Skin Irritation</b>	May cause slight skin irritation. Does not meet Canadian D2B or EU R38 criteria. Based on data from components or similar materials.
<b>Respiratory Irritation</b>	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.
<b>Dermal Toxicity</b>	The LD50 in rabbits is > 2000 mg/Kg. Based on data from similar materials.
<b>Inhalation Toxicity</b>	Not expected to be an inhalation hazard at ambient temperatures.
<b>Oral Toxicity</b>	The LD50 in rats is > 2000 mg/Kg. Based on data from similar materials. Ingestion of this material may cause gastrointestinal irritation.
<b>Dermal Sensitization</b>	Not expected to cause skin sensitization. Based on data from components or similar materials.
<b>Inhalation Sensitization</b>	No data available to indicate product or components may be respiratory sensitizers.

**-- CHRONIC EXPOSURE --**

<b>Chronic Toxicity</b>	No data available to indicate product or components present at greater than 1% are chronic health hazards.
<b>Carcinogenicity</b>	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive Toxicity</b>	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
<b>Teratogenicity</b>	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.
<b>Other</b>	No other health hazards known.

**-- ENVIRONMENTAL TOXICITY --**

<b>Freshwater Fish Toxicity</b>	The acute LC50 is > 1000 mg/L based on similar materials.
<b>Freshwater Invertebrates Toxicity</b>	The acute EC50 is > 1000 mg/L based on similar materials.
<b>Algae Toxicity</b>	The acute EC50 is > 1000 mg/L based on similar materials.
<b>Saltwater Fish Toxicity</b>	Not determined.
<b>Saltwater Invertebrates Toxicity</b>	Not determined.
<b>Bacteria Toxicity</b>	The acute EC50 is > 1000 ppm based on similar materials.
<b>Miscellaneous Toxicity</b>	Not determined.

**-- ENVIRONMENTAL FATE --**

<b>Biodegradation</b>	This product will biodegrade moderately based on OECD 301-type test data for similar products.
<b>Bioaccumulation</b>	Less than 1.0% of the components potentially bioconcentrate, based on octanol/water coefficients.
<b>Soil Mobility</b>	Not determined.
<b>WGK</b>	WGK = 2 according to the Water Hazardous Directive, VwVwS, dated May 17, 1999.

<b>Waste Disposal</b>	This material, if discarded, should not be considered a European hazardous waste.
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<b>ICAO/IATA II</b>	Not regulated
<b>IMDG</b>	Not regulated
<b>IMDG EMS Fire</b>	Not applicable.
<b>IMDG EMS Spill</b>	Not applicable.
<b>IMDG MFAG</b>	Not applicable.
<b>MARPOL Annex II</b>	Not determined.
<b>USCG Compatibility</b>	Not determined.
<b>ADR/RID</b>	Not regulated
<b>ADR/RID Hazard ID No.</b>	Not applicable.
<b>South Africa</b>	Not regulated

*Review classification requirements before shipping materials at elevated temperatures.*

# EMKARATE RL 68H

**Symbol(s)** Not applicable.  
**Indication of Danger** Not applicable.  
**Precautionary Labels** Not applicable.  
**Other Label Information** None.

## -- Global Chemical Inventories --

**USA** All components of this material are on the US TSCA Inventory or are exempt.  
**EU** All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.  
**Japan** All components are in compliance with the Chemical Substances Control Law of Japan.  
**Australia** All components are in compliance with chemical notification requirements in Australia.  
**New Zealand** All components are in compliance with chemical notification requirements in New Zealand.  
**Canada** This material contains a component that has been notified to Environmental Canada and is eligible for addition to the Domestic Substances List (DSL).  
**Switzerland** All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.  
**Korea** All components are in compliance in Korea.  
**Philippines** All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).  
**China** All components of this product are listed on the Inventory of Existing Chemical Substances in China.

## -- Product Registrations --

**Finnish Registration Number** Not Registered  
**Swedish Registration Number** Not Registered  
**Norwegian Registration Number** Not Registered  
**Danish Registration Number** Not Registered  
**Swiss Registration Number** Not Registered  
**Italian Registration Number** Not Registered

## -- Other / International --

**Miscellaneous Regulatory Information** Not determined.

<b>16</b>	<b>Other Information</b>
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### HMIS Codes

Health	Fire	Reactivity
1	1	0

### Relevant R Phrases

Not applicable.

### Revision Indicators

Section	Changed
1 Cas registry number.	20 January 2010
1 Generic /chemical name.	20 January 2010
5 Flash point.	20 January 2010
5 Flash point.	7 January 2010
5 Special firefighting procedures.	15 January 2010
5 Unusual fire& explosion hazards.	20 January 2010
8 Other Exposure Limits	15 January 2010
8 Glove protection.	15 January 2010
8 Respiratory protection.	15 January 2010
9 Appearance.	20 January 2010
9 Flash point.	20 January 2010
9 Flash point.	7 January 2010
10 Incompatibility.	15 January 2010
11 Skin irritation.	15 January 2010
12 Bioconcentration	20 January 2010
12 WGK.	20 January 2010
15 Australia.	15 January 2010
15 Canada.	20 January 2010
15 China	15 January 2010
15 EU EINECS.	20 January 2010
15 Korea.	15 January 2010
15 New Zealand	15 January 2010
15 Phillipines.	15 January 2010
15 Switzerland.	15 January 2010

## EMKARATE RL 68H

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