



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

1	Substance/Product Identification
Product Trade Name	EMKARATE RL 68H
Company	<i>CPI Engineering Services</i> <i>2300 James Savage Rd.</i> <i>Midland, MI 48642</i> <i>Phone: 989-496-3780</i> <i>Fax: 989-496-0316</i>
E-mail contact	EUSDS@lubrizol.com
CAS Number	08306620-5845
Synonyms	None.
Preparation/Revision Date	20 January 2010
Generic Chemical Name	Mixture.
Product Type	Refrigeration Lubricants.
Emergency Phone Number	FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
MSDS No.	19558291-2224661-1050021-102103
2	Hazards Identification
Symbol(s)	Not applicable.
Product Classification	Not applicable.
3	Composition/Information on Ingredients
Hazardous Ingredients This material contains no ingredients requiring disclosure under regulatory hazard criteria for this jurisdiction. See Section 11 for additional details.	
4	First Aid Measures
Ingestion	DO NOT INDUCE VOMITING. Get immediate medical attention.
Eyes	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.
Skin	Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.
Inhalation	Remove exposed person to fresh air if adverse effects are observed.
Additional Information	Note to physician: Treat symptomatically.
5	Fire Fighting Measures
Flash Point	> 270 °C, 518 °F COC (Typical)
Extinguishing Media	CO2, dry chemical, or foam. Water can be used to cool and protect exposed material.
Firefighting Procedures	Recommend wearing self-contained breathing apparatus.
Unusual Fire & Explosion Hazards	None known.
6	Accidental Release Measures
Spill Procedures	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.
7	Handling and Storage
Pumping Temperature	Not determined.
Maximum Handling Temperature	Not determined.
Handling Procedures	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.
Maximum Storage Temperature	Not determined.
Storage Procedures	Keep only in original container.

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Loading Temperature

Not determined.

8	Exposure Controls/Personal Protection
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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.

9	Physical and Chemical Properties
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Flash Point	> 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.

10	Stability and Reactivity
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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 –

Eye Irritation	May cause eye irritation. Does not meet Canadian D2B or EU R36 criteria. Based on data from components or similar materials.
Skin Irritation	May cause slight skin irritation. Does not meet Canadian D2B or EU R38 criteria. Based on data from components or similar materials.
Respiratory Irritation	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.
Dermal Toxicity	The LD50 in rabbits is > 2000 mg/Kg. Based on data from similar materials.
Inhalation Toxicity	Not expected to be an inhalation hazard at ambient temperatures.
Oral Toxicity	The LD50 in rats is > 2000 mg/Kg. Based on data from similar materials. Ingestion of this material may cause gastrointestinal irritation.
Dermal Sensitization	Not expected to cause skin sensitization. Based on data from components or similar materials.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.

– CHRONIC EXPOSURE –

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

– ENVIRONMENTAL TOXICITY –

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

– ENVIRONMENTAL FATE –

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

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

Review classification requirements before shipping materials at elevated temperatures.

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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.
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16	Other Information
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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 Philippines.	15 January 2010
15 Switzerland.	15 January 2010

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