

SAFETY DATA SHEET

1. Identification		
Identification Product name:	EMKARATE(TM) RL 170H	
Additional identification Chemical name:	Carboxylic ester	
Recommended use and restrict	ion on use	
Recommended use: Restrictions on use:	Not determined. Not determined.	
Details of the supplier of the sa Supplier	fety data sheet	
Company Name: Cl	CPI FLUID ENGINEERING	
Address: 23 M	DIV. OF THE LUBRIZOL CORPORATION 300 JAMES SAVAGE ROAD IDLAND, MI 48642	
U Telephone: 98	S 39-496-3780	
(LUBRIZOL)	Y CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300	
2. Hazard(s) identification Hazard Classification		
	Not classified	
Label Elements:		
Hazard Symbol:	No symbol	
Signal Word:	No signal word.	
Hazard Statement:	not applicable	
Precautionary Statement:	not applicable	
Other hazards which do not res in GHS classification:	ult None identified.	
3. Composition/information or	ningredients	
General information:	The components are not hazardous or are below required disclosure limits.	
4. First-aid measures		
Ingestion:	Treat symptomatically. Get medical attention.	
Inhalation:	Remove exposed person to fresh air if adverse effects are observed.	



Skin Contact:	Wash with soap and water. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse. Wash with soap and water. If skin irritation occurs, get medical attention.
Eye contact:	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.
Most important symptoms/effec	ts, acute and delayed
Symptoms:	See section 11.
Indication of immediate medica	I attention and special treatment needed
Treatment:	Treat symptomatically.
5. Fire-fighting measures	
General Fire Hazards:	No unusual fire or explosion hazards noted.
Suitable (and unsuitable) exting	uuishing media
Suitable extinguishing media:	CO2, Dry chemical or Foam. Water can be used to cool and protect exposed material. CO2, dry chemical, foam, water spray, water fog.
Unsuitable extinguishing media:	Not determined.
Specific hazards arising from the chemical:	See section 10 for additional information. Water may cause splattering. Container may rupture on heating.
Special protective equipment a	nd precautions for firefighters
Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Recommend wearing self-contained breathing apparatus.
6. Accidental release measure	S
Personal precautions, protective equipment and emergency 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.
Methods and material for containment and cleaning up:	Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.
Environmental Precautions:	Avoid release to the environment. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so.
7. Handling and storage	
Precautions for safe handling:	Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment.



	Keep containers closed when not in use. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product.
Maximum Handling Temperature:	Not determined.
Conditions for safe storage, including any incompatibilities:	Store away from incompatible materials. See section 10 for incompatible materials.
Maximum Storage Temperature:	Not determined.
8. Exposure controls/persona	I protection
Control Parameters: Occupational Exposure Limits None of the components ha	ave assigned exposure limits.
Appropriate engineering controls:	Use material in well ventilated area only. Adequate ventilation should be provided so that exposure limits are not exceeded. Mechanical ventilation or local exhaust ventilation may be required. No special requirements under ordinary conditions of use and with adequate ventilation.
Individual protection measures	, such as personal protective equipment
General information:	Use personal protective equipment as required.
Eye/face protection:	If contact is likely, safety glasses with side shields are recommended.
Skin Protection Hand Protection:	Suitable gloves can be recommended by the glove supplier.
Other:	Long sleeve shirt is recommended.
Respiratory Protection:	Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. 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.
Hygiene measures:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Appearance

Physical state:	
Form:	
Color:	
Odor:	

liquid liquid Light yellow Mild



Odor threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	554 °F (290 °C) (Cleveland Open Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explo	sive limits
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	< 0.075 torr (20 °C 68 °F)
Vapor density:	No data available.
Relative density:	0.968 68 °F (20 °C)
Solubility(ies)	
Solubility in water:	Slightly Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	170 mm2/s(104 °F(40 °C))17 mm2/s(100 °C(212 °F))
Other information	
Pour Point Temperature:	-20 °F (-29 °C)
10. Stability and reactivity	

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Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of Hazardous Reactions:	Will not occur.
Conditions to Avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials.
Incompatible Materials:	Strong oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

11. Toxicological information

Information on likely routes of exposure	
Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.



Information on toxicological effects	
Acute toxicity Oral	
Product:	Not classified for acute toxicity based on available data.
Dermal Product:	Not classified for acute toxicity based on available data.
Inhalation	No data available
Skin Corrosion/Irritation: Product:	Not classified as a primary skin irritant.
Serious Eye Damage/Eye Irritation Product:	Remarks: Not classified as a primary eye irritant.
Respiratory sensitization:	No data available
Skin sensitization:	No data available
Specific Target Organ Toxicity - Si	i ngle Exposure: No data available
Aspiration Hazard:	No data available
Chronic Effects	
Carcinogenicity:	No data available
IARC Monographs on the Evaluati No carcinogenic components identified	on of Carcinogenic Risks to Humans: ed
US. National Toxicology Program No carcinogenic components identified	
US. OSHA Specifically Regulated S No carcinogenic components identified	Substances (29 CFR 1910.1001-1050): ed
Germ Cell Mutagenicity:	No data available
Reproductive toxicity:	No data available
Specific Target Organ Toxicity - R	Repeated Exposure: No data available



12. Ecological information	
Ecotoxicity Fish	
	No data available
Aquatic Invertebrates	No data available
Toxicity to Aquatic Plants	No data available
Toxicity to soil dwelling o	rganisms No data available
Sediment Toxicity	No data available
Toxicity to Terrestrial Plar	nts No data available
Toxicity to Above-Ground	Organisms No data available
Toxicity to microorganism	No data available
Persistence and Degradability Biodegradation	No data available
Bioaccumulative Potential Bioconcentration Factor (BCF) No data available
Partition Coefficient n-oct	anol / water (log Kow) No data available
Mobility:	No data available
Other Adverse Effects:	No data available.
13. Disposal considerations	
Disposal instructions:	Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied.
Contaminated Packaging:	Container packaging may exhibit hazards.

14. Transport information

DOT

Not regulated.



IMDG

Not regulated.

ΙΑΤΑ

Not regulated.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities ,temperature of the material, package size, and/or origin and destination It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories None known.

SARA 302 Extremely Hazardous Substance SARA 304 Emergency Release Notification SARA 311/312 Hazardous Chemical SARA 313 (TRI Reporting)

This product may contain chemical(s) regulated under the Superfund Amendments and Reauthorization Act (SARA). For additional information please contact Lubrizol Customer Assistance: America(s): AmerLZAMCustomerAssistance@Lubrizol.com; Europe: EMEAICustomerAssistance@Lubrizol.com; Asia: APCustomerAssistance@Lubrizol.com

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

Inventory Status

Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACh)

To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH, or e-mail us at REACH_MSDS_INQUIRIES@Lubrizol.com

Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.



Switzerland (SWISS)

This product requires notification before sale in Switzerland.

Taiwan (TCSCA) All components of this product are listed on the Taiwan inventory.

United States (TSCA) All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

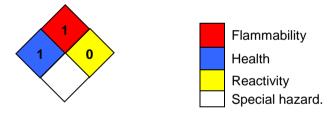
16.Other information, including date of preparation or last revision

HMIS Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	03/07/2015
Version #:	1.0
Source of information:	Internal company data and other publically available resources.
Further Information:	Contact supplier (see Section 1)
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