

# SAFETY DATA SHEET

1. Identification		
Identification Product name:	EMKARATE(TM) RL 46H	
Additional identification Chemical name:	Mixture	
Recommended use and restriction	on on use	
Recommended use: Restrictions on use:	Not determined. Not determined.	
Details of the supplier of the saf Supplier		
1 2	PI FLUID ENGINEERING DIV. OF THE LUBRIZOL CORPORATION	
Address: 23	00 JAMES SAVAGE ROAD DLAND, MI 48642	
US	US 989-496-3780	
Emergency telephone number: FOR TRANSPORT EMERGENCY (LUBRIZOL)	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 resuin GHS classification:	ult None identified.	
3. Composition/information on	ingredients	
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.	
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/effects, acute and delayed		
Symptoms:	See section 11.	
Indication of immediate medical 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	uishing media	
Suitable extinguishing media:	CO2, Dry chemical or Foam. Water can be used to cool and protect exposed material.	
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.	
Specific hazards arising from the chemical:	A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.	
Special protective equipment ar	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.	



	Avoid contact with eyes, skin and clothing. 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. Keep in original container. See section 10 for incompatible materials.
Maximum Storage Temperature:	Not determined.

Keep containers closed when not in use. Avoid inhalation of dust, aerosol, mist, spray, fume, or vapor. Use with appropriate and adequate ventilation.

# 8. Exposure controls/personal protection

# Control Parameters:

### **Occupational Exposure Limits**

None of the components have assigned exposure limits.

Appropriate engineering controls:	Adequate ventilation should be provided so that exposure limits are not exceeded.
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:	Neoprene. Consult clothing/glove manufacturer to determine appropriate type of glove for given situation. Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear. Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.
Other:	Long sleeve shirt is recommended. Wear apron or protective clothing in case of contact.
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:	liquid
Form:	liquid
Color:	Colorless to yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	500 °F (260 °C) (Cleveland Open Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explo	osive 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:	No data available.
Vapor density:	No data available.
Relative density:	0.977 68 °F (20 °C)
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	770 °F (410 °C)
Decomposition temperature:	No data available.
Viscosity:	46 mm2/s(104 °F (40 °C))7.1 mm2/s(100 °C (212 °F))
Other information	
Pour Point Temperature:	-54 °F (-48 °C)
10. Stability and reactivity	

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 acids Strong bases. 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 eff Acute toxicity Oral	iects
Product:	Not classified for acute toxicity based on available data. Ingestion of this material may cause gastric disturbances.
Dermal Product:	Not classified for acute toxicity based on available data.
Inhalation Product:	Not classified for acute toxicity based on available data.
Skin Corrosion/Irritation: Product:	Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. Remarks: Not classified as a primary skin irritant.
Serious Eye Damage/Eye Product:	Irritation: Remarks: Not classified as a primary eye irritant.
Respiratory sensitization	No data available
Skin sensitization:	No data available
Specific Target Organ To	xicity - Single Exposure: No data available
Aspiration Hazard:	No data available
Chronic Effects Carcinogenicity:	No data available
IARC Monographs on the No carcinogenic componen	Evaluation of Carcinogenic Risks to Humans: ts identified
US. National Toxicology I No carcinogenic componen	Program (NTP) Report on Carcinogens: ts identified
US. OSHA Specifically Re No carcinogenic componen	egulated Substances (29 CFR 1910.1001-1050): ts identified
Germ Cell Mutagenicity:	No data available



#### **Reproductive toxicity:**

No data available

#### Specific Target Organ Toxicity - Repeated Exposure: No data available

# 12. Ecological information Ecotoxicity Fish Product: LC 50 (Not reported, 4 d): > 10,000 mg/l Aquatic Invertebrates EC 50 (Water flea (Daphnia magna), 2 d): > 1,000 mg/l Product: **Toxicity to Aquatic Plants** Product: EC 50 (Green algae (Selenastrum capricornutum), 4 d): > 1,000 mg/l Toxicity to soil dwelling organisms No data available **Sediment Toxicity** No data available **Toxicity to Terrestrial Plants** No data available **Toxicity to Above-Ground Organisms** No data available Toxicity to microorganisms Product: EC 50 (Sludge, 0.1 d): > 10,000 mg/l Persistence and Degradability Biodegradation Product: OECD TG 301 B, 74.07 %, 28 d, Readily biodegradable **Bioaccumulative Potential Bioconcentration Factor (BCF)** No data available Partition Coefficient n-octanol / 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.



# 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.

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance 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:	03/08/2015
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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