





## 安全資料表

### 危害物料資料

<b>1. 產品與用途</b>							
1.1 物料名稱	Emkarate RL 68H						
1.2 用途	潤滑劑						
<b>2. 危害成份</b>							
2.1 危害分類及標籤							
	有害	有毒	腐蝕性	易燃	刺激性	爆炸性	助燃
	( )	( )	( )	( )	(✓)	( )	( )
2.2 酸鹼值(pH)	不適用			2.3 曝露限制(OEL)		無資料	
2.4 致癌物質	沒有			2.5 其他危害		無資料	
2.5 潛在危害	眼睛接觸：不會造成刺激						
	皮膚接觸：可能會引致刺激皮膚，不會中毒除非滲入皮膚內						
	食入及吸入：會刺激食道及呼吸管線						
<b>3. 火警和爆炸資料</b>							
3.1 燃燒物成份比例	無資料		3.2 沸點(°F)	無資料		3.3 溶點( )	不適用
3.4 閃點(°F)	518		3.5 比重	0.977		3.6 氣壓力	不適用
3.7 爆炸極限(濃度)	不適用		3.8 溶解度	不溶於水		3.9 氣味	氣味溫和
3.10 滅火設備	水劑、泡沫、二氧化碳及化學乾粉劑之滅火筒						
<b>4. 急救處理</b>							
4.1 眼睛接觸	立即用大量清水沖洗 15 分鐘，如持續感覺不適，儘快尋求醫療護理。						
4.2 皮膚接觸	用大量清水或肥皂水沖洗接觸部位，如紅腫、痕癢或感覺灼熱，儘快尋求醫療護理。						
4.3 吸入	迅速離開現場到新鮮空氣處。如持續咳嗽或其他呼吸管道徵狀，儘快尋求醫療護理。						
4.4 食入	不要強行嘔吐，飲用 1 至 2 杯清水及立即尋求醫療護理。						
<b>5. 個人防護裝備</b>							
<input checked="" type="checkbox"/> 橡膠手套		<input checked="" type="checkbox"/> 防化學品護眼罩			<input type="checkbox"/> 口罩		
<b>6. 處理及使用應知事項</b>							
6.1 儲存注意事項:		• 儲存於原本器皿					
6.2 意外洩漏處理的方法:		穿著合適個人防護裝備，以布碎或泥沙等墮性物料吸收洩漏物，以清水混會清潔劑沖洗殘留地面之化學物，經污水渠排放。					
<b>7. 其他資料</b>							
- N/A							

# SAFETY DATA SHEET

*This material is to be used for research purposes only under the supervision of a technically qualified individual. The toxicological properties may have not been completely characterized. Please determine your responsibilities under your local regulations.*

## 1. Identification of the substance or mixture and of the supplier

**Product identifier**

Product name: EMKARATE RL 68H

**Additional identification**

Chemical name: Mixture

**Recommended use and restriction on use**

Recommended use: Research and Development  
Restrictions on use: None identified.

**Details of the supplier of the safety data sheet****Supplier**

Company Name: LUBRIZOL INTERNATIONAL, INC.  
Address: 28 RIVER STREET  
SILVERWATER NSW, 2128  
AU  
Telephone: TEL: (02) 9741-5200

**Emergency telephone number:**

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 703 527 3887 OR WITHIN AUSTRALIA  
(02) 9037 2994

## 2. Hazard(s) identification

**GHS classification of substance or mixture, and national or regional information:**

Not classified

**GHS label elements**

Hazard symbol(s): No symbol  
Signal Word: Not applicable  
Hazard Statement(s): Not applicable  
Precautionary statement(s): Not applicable

Other hazards which do not result in GHS classification: None.

### 3. Composition/Information on Ingredients

#### Mixtures

**Composition Comments:** The components are not hazardous or are below required disclosure limits.

### 4. First aid measures

#### Description of first aid measures

**Inhalation:** Remove exposed person to fresh air if adverse effects are observed.

**Eye contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

**Skin Contact:** Wash with soap and water. If skin irritation occurs, get medical attention.

**Ingestion:** Treat symptomatically. Get medical attention.

**Most important symptoms and effects, both acute and delayed:** See section 11.

#### Indication of any immediate medical attention and special treatment needed

**Treatment:** Treat symptomatically.

### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

#### Extinguishing media

**Suitable extinguishing media:** CO<sub>2</sub>, dry chemical, foam, water spray, water fog.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazard 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.

#### Advice for firefighters

**Special fire-fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Recommend wearing self-contained breathing apparatus.

Hazchem Code: None.

**6. Accidental Release Measures**

<b>Personal precautions, protective equipment and emergency procedures:</b>	No data available.
<b>Environmental Precautions:</b>	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.
<b>Methods and material for containment and cleaning up:</b>	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.
<b>Reference to other sections:</b>	See sections 8 and 13 for additional information.

**7. Handling and Storage:**

<b>Precautions for safe handling:</b>	Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment.
<b>Maximum Handling Temperature:</b>	70 °C
<b>Conditions for safe storage, including any incompatibilities:</b>	Store away from incompatible materials. See section 10 for incompatible materials.
<b>Maximum Storage Temperature:</b>	45 °C

**8. Exposure Controls/Personal Protection**

**Control Parameters:**  
**Occupational Exposure Limits**  
None of the components have assigned exposure limits.

**Exposure controls**

<b>Appropriate engineering controls:</b>	No special requirements under ordinary conditions of use and with adequate ventilation.
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**Individual protection measures, such as personal protective equipment**

<b>General information:</b>	Use personal protective equipment as required.
<b>Eye/face protection:</b>	If contact is likely, safety glasses with side shields are recommended.
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Rubber (natural, latex). Polyvinyl chloride (PVC). Nitrile.

<b>Other:</b>	No data available.
<b>Respiratory Protection:</b>	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.
<b>Hygiene measures:</b>	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

### Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Yellow
<b>Odor:</b>	Mild
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	Not applicable
<b>Freezing point:</b>	No data available.
<b>Boiling Point</b>	286 °C (101.3 kPa)
<b>Flash Point:</b>	185 °C (Setaflash Closed Cup)
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.

#### Upper/lower limit on flammability or explosive limits

<b>Flammability Limit - Upper (%):</b>	No data available.
<b>Flammability Limit - Lower (%):</b>	No data available.
<b>Vapor pressure</b>	0.00846 hPa (25 °C) 0.0119 hPa (40 °C) 0.0681 hPa (100 °C)
<b>Relative vapor density</b>	No data available.
<b>Relative density</b>	0.974 - 0.985 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Insoluble in water
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	> 10
<b>Autoignition Temperature:</b>	352 °C
<b>Decomposition Temperature:</b>	No data available.
<b>Viscosity:</b>	63 - 73 mm <sup>2</sup> /s (40 °C); 8.8 - 9.8 mm <sup>2</sup> /s (100 °C )
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.
<b>Pour Point Temperature:</b>	-20 °C

**10. Stability and Reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Will not occur.
<b>Conditions to avoid:</b>	Do not expose to excessive heat, ignition sources, or oxidizing materials.
<b>Incompatible Materials:</b>	Strong acids. Strong bases.
<b>Hazardous Decomposition Products:</b>	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**

<b>Inhalation:</b>	No data available.
<b>Ingestion:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

**Information on toxicological effects****Acute toxicity****Oral**

Product:	LD 50 (Rat): > 2,000 mg/kg (Measured) Not classified
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**Dermal**

Product:	LD 50 (Rat): > 2,000 mg/kg (Measured) Not classified
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**Inhalation**

Product:	Dust and mist: LC 50 (Rat, , 4 h): Not classified Dust and mist Vapour: LC 50 (Rat, , 4 h): Not classified Vapour
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**Skin Corrosion/Irritation:**

Product:	Classification: Not irritating (Measured); Rabbit. Remarks: Not classified as a primary skin irritant.
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**Serious Eye Damage/Eye Irritation:**

Product:	Classification: Not irritating (Measured); Rabbit. Remarks: Not classified as a primary eye irritant.
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**Respiratory sensitization:**

No data available

**Skin sensitization:**

Product:

Classification: Not a skin sensitizer. (Measured)

**Specific Target Organ Toxicity - Single Exposure:**

Product:

If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

No data available

**Aspiration Hazard:**

No data available

**Chronic Effects****Carcinogenicity:**

No data available

**Germ Cell Mutagenicity:**

Product:

In vitro mutagenicity tests have been negative.

**Reproductive toxicity:**

Product:

Not Classified based on available data.

**Specific Target Organ Toxicity - Repeated Exposure:**

No data available

**12. Ecological Information****Ecotoxicity****Fish**

Product:

LC 50 (Rainbow Trout, 4 d): &gt; 100 mg/l

**Aquatic Invertebrates**

Product:

EC 50 (Water flea (Daphnia magna), 2 d): &gt; 100 mg/l

**Toxicity to Aquatic Plants**

Product:

EC 50 (Algae (Pseudokirchneriella subcapitata), 3 d): > 100 mg/l  
NOEC (Algae (Pseudokirchneriella subcapitata), 3 d): 100 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:

NOEC (Sludge, 3 h): 560 mg/l

**Persistence and Degradability****Biodegradation**

Product:

OECD TG 301 B, 37 %, 28 d, Not readily degradable.

**Bioaccumulative potential****Bioconcentration Factor (BCF)**

No data available

**Partition Coefficient n-octanol / water (log Kow)**

Product:

Log Kow: &gt; 10 40 °C

**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****ADG**

Not regulated.

**IATA**

Not regulated.

**IMDG**

Not regulated.

**Transport in bulk according to Annex II of MARPOL 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. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.



## 15. Regulatory Information

### Inventory Status

#### Australia (AIIC)

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

#### Canada (DSL/NDSL)

All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

#### 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 e-mail REACH@SDSInquiries.com.

#### Great Britain (UK REACH)

To obtain information on the UK REACH compliance status of this product, please e-mail REACH@SDSInquiries.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.

#### Turkey (KKDIK)

To obtain information on the KKDIK compliance status of this product, please e-mail REACH@SDSInquiries.com.

#### United States (TSCA)

All substances contained in this product are listed on the TSCA inventory or are exempt.

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

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

**Poison Schedule Number:** Poisons schedule number not allocated

## 16. Other Information

**Key literature references and sources for data:** No data available.

**Other information:** Contact supplier (see Section 1)

Revision(s) are noted by the double bar in the margin and the light gray box.

**Issue Date:** 13.02.2023

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