

SAFETY DATA SHEET

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

Product identifier

Product name: EMKARATE(TM) RL 220H PLUS

Additional identification

Chemical name: Carboxylic ester
CAS-No.: Not applicable.

Recommended use and restriction on use

Recommended use: Refrigeration Lubricants.
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

General information: 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:	Flush thoroughly with water. If irritation occurs, get medical assistance. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact:	Take off contaminated clothing and wash before re-use. Wash with soap and water. If skin irritation occurs, get medical attention.
Ingestion:	Rinse mouth. Get medical attention if symptoms occur.

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. Not relevant.

5. Fire-fighting measures

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

Extinguishing 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 hazard arising from the chemical: See section 10 for additional information. Water may cause splattering. Container may rupture on heating.

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

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.

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.

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.

Reference to other sections: See sections 8 and 13 for additional information.

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/Personal Protection

Control Parameters:

Occupational Exposure Limits

None of the components have assigned exposure limits.

Exposure controls

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.

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: Use nitrile or neoprene gloves. Suitable gloves can be recommended by the glove supplier.

Other: Long sleeve shirt is recommended. Do not wear rings, watches or similar apparel that could entrap the material.

Respiratory Protection: A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene measures: Observe good industrial hygiene practices.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Light yellow

Odor:	Mild
Odor Threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	100 °C
Flash Point:	> 233 °C (Cleveland Open Cup)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.

Upper/lower limit on flammability or explosive limits

Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.

Vapor pressure:	< 0.01 kPa (20 °C)
Vapor density (air=1):	No data available.
Relative density:	1 - 1.05 (20 °C)

Solubility(ies)

Solubility in Water:	Slightly Soluble
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	No data available.
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Autoignition Temperature:	> 400 °C
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Decomposition Temperature:	No data available.
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Viscosity:	220 mm ² /s (40 °C); 19 mm ² /s (100 °C)
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Explosive properties:	No data available.
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Oxidizing properties:	No data available.
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Pour Point Temperature	-27 °C
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10. Stability and Reactivity

Reactivity:	No data available.
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Chemical Stability:	Material is stable under normal conditions.
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Possibility of hazardous reactions:	Will not occur.
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Conditions to avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials.
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Incompatible Materials:	Strong oxidizing agents.
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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:	Causes mild skin irritation.
Eye contact:	No data available.

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

Product:	May cause irritation of the gastrointestinal tract. Not classified for acute toxicity based on available data.
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Dermal

Product:	Prolonged or widespread contact with this material could result in the absorption of potentially harmful amounts. Not classified for acute toxicity based on available data.
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Inhalation

No data available

Skin Corrosion/Irritation:

Product:	Causes mild skin irritation.
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Serious Eye Damage/Eye Irritation:

Product:	Remarks: Not classified as a primary eye irritant.
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Respiratory sensitization:

No data available

Skin sensitization:

No data available

Specific Target Organ Toxicity - Single Exposure:

No data available

Aspiration Hazard:

No data available

Chronic Effects**Carcinogenicity:**

No data available

Notifiable Carcinogenic Substances

No carcinogenic components identified

Prohibited Carcinogenic Substances

	No carcinogenic components identified
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:	No carcinogenic components identified
ACGIH Carcinogen List:	No carcinogenic components 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

No data available

Aquatic Invertebrates

No data available

Toxicity to Aquatic Plants

No data available

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

No data available

Persistence and Degradability

Biodegradation

No data available

Bioaccumulative Potential

Bioconcentration Factor (BCF)

No data available

Partition Coefficient n-octanol / water (**log K_{ow}**)

No data available

Mobility:

No data available

Other Adverse Effects: No data available.

13. Disposal Considerations

Disposal methods: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging: Container packaging may exhibit hazards.

14. Transport Information

IATA

Not regulated.

International standards

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 (AICS)

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.

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)

This product contains a substance that is not listed on the Switzerland Inventory of Notified New Substances.

Taiwan (TCSCA)

This product requires notification before sale in Taiwan.

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.

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