



SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: **EMKARATE™ RL 220H PL**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Not determined.

Uses advised against: Not determined.

1.3 Details of the supplier of the safety data sheet

Supplier

Company Name: LUBRIZOL LIMITED
THE KNOWLE, NETHER LANE
Address: THE KNOWLE, NETHER LANE
HAZELWOOD, DERBYSHIRE, DE56 4AN
GB
Telephone: (44) 01332-842211
E-mail contact: EUSDS@lubrizol.com (Lubrizol Safety Data Sheets can be obtained at
www.mylubrizol.com)

1.4 Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 703 527 3887 (LUBRIZOL)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

This product does not meet the classification requirements of the current European legislation.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC as amended.

Not classified

2.2 Label elements according to Regulation (EC) No 1272/2008 as amended

not applicable

2.3 Other hazards:

None identified.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Regulation No. 1272/2008.

This material has no known hazards under applicable laws.

Directive 67/548/EEC.

This material has no known hazards under applicable laws.

SECTION 4: First aid measures

4.1 Description of first aid measures

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|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |

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

4.3 Indication of any immediate medical attention and special treatment needed

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|-------------------|------------------------|
| Hazards: | No data available. |
| Treatment: | Treat symptomatically. |

SECTION 5: Firefighting measures

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

5.1 Extinguishing media

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|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media: | CO ₂ , Dry chemical or Foam. Water can be used to cool and protect exposed material. CO ₂ , dry chemical, foam, water spray, water fog. |
| Unsuitable extinguishing media: | Not determined. |

5.2 Special hazards arising from the substance or mixture: See section 10 for additional information. Water may cause splattering. Container may rupture on heating.

5.3 Advice for firefighters

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| Special fire fighting procedures: | No data available. |
| Special protective equipment for fire-fighters: | Recommend wearing self-contained breathing apparatus. |

SECTION 6: Accidental release measures

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| 6.1 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. |
| 6.2 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. |
| 6.3 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. |

6.4 Reference to other sections:

See sections 8 and 13 for additional information.

SECTION 7: Handling and storage:

7.1 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.

7.2 Conditions for safe storage, including any incompatibilities:

Store away from incompatible materials. See section 10 for incompatible materials.

Maximum Storage Temperature:

Not determined.

7.3 Specific end use(s):

End uses are listed in an attached exposure scenario when one is required.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

8.2 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. 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:

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.

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|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. 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. |
| Environmental Controls: | No data available. See section 6 for details. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

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|------------------------|--------------|
| 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.

Autoignition Temperature: > 400 °C

Decomposition Temperature: No data available.

Viscosity: 220 mm²/s (40 °C); 19 mm²/s (100 °C)

Explosive properties: No data available.

Oxidizing properties: No data available.

VOC Content: No data available.

Other information

Pour Point Temperature: -27 °C

SECTION 10: Stability and reactivity

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|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 10.1 Reactivity: | No data available. |
| 10.2 Chemical Stability: | Material is stable under normal conditions. |
| 10.3 Possibility of Hazardous Reactions: | Will not occur. |
| 10.4 Conditions to Avoid: | Do not expose to excessive heat, ignition sources, or oxidizing materials. |
| 10.5 Incompatible Materials: | Strong oxidizing agents. |
| 10.6 Hazardous Decomposition Products: | Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion. |

SECTION 11: Toxicological information

Information on likely routes of exposure

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|----------------------|------------------------------|
| Inhalation: | No data available. |
| Ingestion: | No data available. |
| Skin Contact: | Causes mild skin irritation. |
| Eye contact: | No data available. |

11.1 Information on toxicological effects

Acute toxicity

Oral

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

Dermal

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

Inhalation

No data available

Skin Corrosion/Irritation:

Product: Causes mild skin irritation.

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 - Single Exposure:
No data available

Aspiration Hazard:
No data available

Chronic Effects

Carcinogenicity:
No data available

Germ Cell Mutagenicity:
No data available

Reproductive toxicity:
No data available

Specific Target Organ Toxicity - Repeated Exposure:
No data available

SECTION 12: Ecological information

12.1 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

12.2 Persistence and Degradability

Biodegradation
No data available

BOD/COD Ratio
No data available

12.3 Bioaccumulative Potential

Bioconcentration Factor (BCF)
No data available

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

No data available

12.4 Mobility:

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other Adverse Effects:

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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.

SECTION 14: Transport information

ADR

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable.

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.

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.

SECTION 15: Regulatory information

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

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)

This product requires notification before sale in Switzerland.

Taiwan (TCSCA)

This product requires notification before sale in Taiwan.

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.

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

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| SECTION 16: Other information |
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Key literature references and sources for data:

Internal company data and other publically available resources.

Wording of the R-phrases and H-statements in section 2 and 3: none

Issue Date:

07.03.2015

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