

# Safety Data Sheet

Issue Date: 15-November-2005

Revision Date: 30-September-2016

521593 REV D

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Emkarate® RL32HB

### Other Names

**Product(s)** Refrigeration oil, Compressor oil, Synthetic polyol ester (POE) lubricant

### Recommended use of the chemical and restrictions on use

**Recommended Use** Refrigeration Oil

### Details of the supplier of the safety data sheet

#### **Distributor**

Bosch Automotive Service Solutions Inc.  
655 Eisenhower Drive  
Owatonna, MN 55060 USA

### Emergency Telephone Number

**Company Phone Number** (800) 822-5561  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

The product has been classified according to the legislation in force.

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

Chronic hazards to the aquatic environment Category 3 H412: Harmful to aquatic life with long lasting effects.

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

Not classified

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

**Signal Words:** Not applicable  
**Hazard Statement(s):** H412: Harmful to aquatic life with long lasting effects.

### Precautionary Statement

**Disposal:** P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### Supplemental label information

Safety data sheet available for professional user on request.

### Other hazards:

None identified.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Mixtures

**Regulation No. 1272/2008:** This material has no known hazards under applicable laws.

**Directive 67/548/EEC.**

Chemical Name	Concentration	EC No.	REACH Registration No.	M-Factor:	Notes
Phosphoric acid, tris (4-methylphenyl) ester	1.0 - 10%	201-105-6			

600, 700 and 900 ECHA List Numbers do not have any legal significance; rather they are purely technical identifiers and are displayed for informational purposes only.

**Classification Directive 67/548/EEC.**

Chemical Name	Classification	Notes
Phosphoric acid, tris (4-methylphenyl) ester	Xn; R21/22 N; R51/53	

The full text for all R-phrases is displayed in section 16.

## 4. FIRST AID MEASURES

**Description of first aid measures**

<b>Inhalation</b>	Remove exposed person to fresh air if adverse effects are observed.
<b>Eye contact</b>	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.
<b>Skin contact</b>	Wash with soap and water. If skin irritation occurs, get medical attention.
<b>Ingestion</b>	Treat symptomatically. Get medical attention.

**Most important symptoms/effects, acute and delayed**

See section 11.

**Indication of immediate medical attention and special treatment needed**

<b>Hazards:</b>	No data available.
<b>Treatment:</b>	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:** Not determined.

**Special hazards arising from the substance or mixture**

See section 10 for additional information.

**Advice for firefighters**

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

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures**

Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations.

**Environmental Precautions**

Avoid release to the environment. 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. Avoid environmental contamination.

**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.

**Specific end use(s)**

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

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

**Exposure controls**

**Appropriate engineering controls**      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:**      No data available.

**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.

**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.

**Environmental Controls**

No data available. See section 6 for details.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties****Appearance:**

**Physical state**      Liquid

**Form**      Liquid

**Color**      Clear

**Odor**      Mild

**Odor Threshold**      No data available.

**pH**      No data available.

**Freezing point**      No data available.

**Boiling Point**      No data available.

Flash Point	> 210 °C (Cleveland Open Cup)
Evaporation Rate	No data available.
Flammability (solid, gas)	No data available.
<b>Upper/lower limit on flammability or explosive limits:</b>	
Flammability Limit - Upper (%)	No data available.
Flammability Limit - Lower (%)	No data available.
Vapor pressure	No data available.
Vapor density (air=1)	No data available.
Relative density	0.98 (15.6 °C)
<b>Solubility(ies):</b>	
Solubility in Water	Slightly Soluble
Solubility (other)	No data available.
Partition coefficient (n-octanol/water)	No data available.
Autoignition Temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	33.7 mm <sup>2</sup> /s (40 °C); 5.9 mm <sup>2</sup> /s (100 °C)
Explosive properties	No data available.
Oxidizing properties	No data available.
VOC Content	No data available

## 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

None known.

### 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. Ingestion of this material may cause gastric disturbances.

##### Dermal:

##### Product

Not classified for acute toxicity based on available data. Skin absorption of components of this material will cause systemic effects; note toxicity in other sections.

<b>Inhalation:</b>	
<b>Product</b>	Not classified for acute toxicity based on available data
<b>Skin Corrosion/Irritation:</b>	
<b>Product</b>	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.
<b>Serious Eye Damage/Eye Irritation:</b>	
<b>Product</b>	Remarks: Not classified as a primary eye irritant.
<b>Respiratory sensitization</b>	No data available.
<b>Skin sensitization</b>	No data available.
<b>Specific Target Organ Toxicity:</b>	
<b>Single Exposure</b>	No data available.
<b>Aspiration Hazard</b>	No data available.
<b>Chronic Effects:</b>	
<b>Carcinogenicity</b>	No data available.
<b>Germ Cell Mutagenicity</b>	No data available.
<b>Reproductive toxicity</b>	No data available.
<b>Specific Target Organ Toxicity - Repeated Exposure</b>	No data available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

<b>Fish</b>	No data available.
<b>Aquatic Invertebrates</b>	No data available.
<b>Toxicity to Aquatic Plants</b>	No data available.
<b>Toxicity to soil dwelling organisms</b>	No data available.
<b>Sediment Toxicity</b>	No data available.
<b>Toxicity to Terrestrial Plants</b>	No data available.
<b>Toxicity to Above-Ground Organisms</b>	No data available.
<b>Toxicity to microorganisms</b>	No data available.

### Persistence and Degradability

<b>Biodegradation</b>	No data available.
<b>BOD/COD Ratio</b>	No data available.

### Bioaccumulative Potential

<b>Bioconcentration Factor (BCF)</b>	No data available.
<b>Partition Coefficient n-octanol/water (log Kow)</b>	No data available.
<b>Mobility</b>	No data available.
<b>Results of PBT and vPvB assessment</b>	No data available.
<b>Other Adverse Effects</b>	No data available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Disposal methods</b>	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.
<b>Contaminated packaging</b>	Container packaging may exhibit hazards.

## 14. TRANSPORT INFORMATION

### ADR

Not regulated.

### IMDG

Not regulated.

**IATA**

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. 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

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

<b>Australia (AICS)</b>	All components are in compliance with chemical notification requirements in Australia.
<b>Canada (DSL/NDL)</b>	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
<b>China (IECSC)</b>	All components of this product are listed on the Inventory of Existing Chemical Substances in China.
<b>European Union (REACH)</b>	To obtain information on the REACH compliance status of this product, please visit <a href="http://Lubrizol.com/REACH">Lubrizol.com/REACH</a> , or e-mail at: <a href="mailto:REACH_MSDS_INQUIRIES@Lubrizol.com">REACH_MSDS_INQUIRIES@Lubrizol.com</a>
<b>Japan (ENCS)</b>	All components are in compliance with the Chemical Substances Control Law of Japan.
<b>Korea (ECL)</b>	All components are in compliance in Korea.
<b>New Zealand (NZIoC)</b>	All components are in compliance with chemical notification requirements in New Zealand.
<b>Philippines (PICCS)</b>	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
<b>Switzerland (SWISS)</b>	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
<b>Taiwan (TCSCA)</b>	All components of this product are listed on the Taiwan inventory.
<b>United States (TSCA)</b>	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.*

**Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

## 16. OTHER INFORMATION

**Key literature references and sources for data**

Manufacturer data and other publically available resources.

**Wording of the R-phrases and H-statements in section 2 and 3**

<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H400</b>	Very toxic to aquatic life.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>R21/22</b>	Harmful in contact with skin and if swallowed.
<b>R51/53</b>	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**Issue Date** 15.11.2005

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**End of Safety Data Sheet**

# Hoja de datos de seguridad

Fecha de emisión:  
15 de noviembre de 2005

Fecha de revisión:  
30 de septiembre de 2016

521593 REV D

## 1. IDENTIFICACIÓN

### Identificador del producto

Nombre del producto Emkarate® RL32HB

### Otros nombres

Producto(s) Aceite para refrigeración, aceite del compresor, lubricante sintético poliol éster (POE)

### Uso recomendado del producto químico y restricciones de uso

Uso recomendado Aceite para refrigeración

### Detalles del proveedor de la hoja de datos de seguridad

#### Distribuidor

Bosch Automotive Service Solutions Inc.  
655 Eisenhower Drive  
Owatonna, MN 55060 EE.UU.

### Número de teléfono de emergencia

Número de teléfono de la compañía +1 (800) 822-5561

Número de teléfono de emergencia INFOTRAC 1-352-323-3500 (internacional)

(24 horas) 1-800-535-5053 (Norteamérica)

## 2. IDENTIFICACIÓN DE PELIGROS

### Clasificación de la sustancia o mezcla

El producto ha sido clasificado de acuerdo con la legislación vigente.

### Clasificación de acuerdo con el Reglamento (CE) No 1272/2008 en su versión modificada

Peligros crónicos para el medio ambiente Categoría 3 H412: Nocivo para los organismos acuáticos, con efectos duraderos.

### Clasificación según la Directiva 67/548/CEE o 1999/45/CE en su versión modificada

No clasificada

### Elementos de la etiqueta de acuerdo con el Reglamento (CE) No 1272/2008 en su versión modificada

Palabras clave: No aplica

Declaración(es) de peligro H412: Nocivo para los organismos acuáticos, con efectos duraderos.

### Declaración de precaución

Desecho: P501: Deseche el contenido/recipiente en una planta de tratamiento y eliminación apropiada de conformidad con las leyes y reglamentos aplicables, y las características del producto en el momento de la eliminación.

### Información suplementaria en la etiqueta

Hoja de seguridad a disposición del usuario profesional que lo solicite.

### Otros peligros:

Ninguno identificado.

## 3. COMPOSICIÓN/INFORMACIÓN DE LOS INGREDIENTES

### Mezclas

Regulación No. 1272/2008: Este material no tiene ningún peligro conocido según las leyes aplicables.