

**Safety Data Sheet according to Regulation (EU) No. 1907/2006**

Robert Bosch GmbH  
Revision date : 08.04.2008

Revision no. : 1,01



**BOSCH**

**LHM+**  
00377-0032A

**1. Identification of the substance/preparation and of the company/undertaking**

**Identification of the substance or preparation**

LHM+

**Use of the substance/preparation**

Hydraulic fluid

**Company/undertaking identification**

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**2. Hazards identification**

**Explication of special hazards for human health and environment**

Not classified as dangerous according to directive 1999/45/EEC

**3. Composition/information on ingredients**

**Chemical characterization** ( preparation )

Mixture of the following substances with non-hazardous admixtures

**Hazardous components**

EC-No.	CAS-No.	Chemical name	Quantity	Classification
265-148-2	64742-46-7	Distillates (petroleum)	25 - 50 %	Xn R65

Full text of each relevant R phrase can be found in heading 16.

**4. First aid measures**

**General information**

Remove contaminated soaked clothing immediately.

**After inhalation**

Ensure of fresh air.

**After contact with skin**

In case of contact with skin wash off with soap and water.

**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If eye irritation persists, consult a specialist.

**After ingestion**

Do not induce vomiting.

Seek medical treatment immediately.

**Advice to doctor**

Attention. Beware, danger of aspiration.



## **5. Fire-fighting measures**

### **Suitable extinguishing media**

Foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water-spray.

### **Extinguishing media which must not be used for safety reasons**

Full water jet

### **Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases**

Fire may produce:

Carbon monoxide, carbon dioxide, sulphur oxides and nitrogen oxides (NO<sub>x</sub>).

### **Special protective equipment for fire-fighters**

In case of fire, wear suitable respiratory equipment with positive air supply.

Protective suit

### **Additional information**

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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## **6. Accidental release measures**

### **Personal precautions**

Ensure adequate ventilation.

Use personal protective clothing.

### **Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

Do not discharge into the subsoil/soil.

### **Methods for cleaning up/taking up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

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## **7. Handling and storage**

### **Handling**

#### **Advice on safe handling**

Avoid contact with skin, eyes and clothing.

Ensure adequate ventilation.

#### **Advice on protection against fire and explosion**

No special protective measures against fire required.

### **Storage**

#### **Requirements for storage rooms and vessels**

Keep container tightly closed in a dry, cool and well-ventilated place.

#### **Advice on storage compatibility**

Do not store with oxidizing agents.

#### **Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

**Storageclass (VCI)**

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## **8. Exposure controls/personal protection**

### **Exposure limit values**

#### **Exposure controls**

##### **Occupational exposure controls**

Ensure adequate ventilation, especially in confined areas.

##### **Protective and hygiene measures**

Wash hands before breaks and after work.

Take off immediately all contaminated clothing.

Avoid contact with skin, eyes and clothing.

When using, do not eat, drink or smoke.

Use barrier skin cream.

##### **Respiratory protection**

No personal respiratory protective equipment normally required.

##### **Hand protection**

Short time contact: Solvent-resistant gloves (nitrile rubber).

Glove material must be impermeable and resistant against product / substance / preparation. Gloves material should comply with breakthrough times, permeation rates, and degradation.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

##### **Eye protection**

During transferring safety goggles are recommended.

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## **9. Physical and chemical properties**

### **General information**

Physical state	Liquid
Colour	Green
Odour	Characteristic

### **Important health, safety and environmental information**

		Test method
<b>Changes in the physical state</b>		
Melting point	< - 50 °C	DIN/ISO 3016
Boiling point	> 270 °C	ISO 7308
Flash point	130 °C	ISO 2592

#### **Flammability**

#### **Explosive properties**

The product is not explosive

Lower explosion limits	0,6 vol. %	
Upper explosion limits	6,5 vol. %	
Ignition temperature	215 °C	DIN 51794
Vapour pressure : at (20 °C)	0,1 hPa	
Density (at 20 °C) :	0,84 g/cm <sup>3</sup>	ISO 12185
Water solubility :	Insoluble	

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Viscosity / kinematic : 18 mm<sup>2</sup>/s    DIN 51562  
at (40 °C)

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**10. Stability and reactivity**

**Conditions to avoid**

To avoid thermal decomposition, do not overheat.

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products**

Fire may produce:

Carbon monoxide, carbon dioxide, sulphur oxides, and nitrogen oxides (NO<sub>x</sub>).

**Additional information**

No decomposition if suitable use.

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**11. Toxicological information**

**Corrosive and irritant effects**

Skin irritation (rabbit): Non-irritant (OECD 404)

Eyes irritation (rabbit): Non-irritant (OECD 405)

**Sensitising effects**

Non-sensitising

**Empirical data on effects on humans**

Frequent persistent contact with the skin may cause skin irritation.

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**12. Ecological information**

**Further information**

Do not flush into surface water or sanitary sewer system.

Hazard to waters

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**13. Disposal considerations**

**Advice on disposal**

Can be incinerated, when in compliance with local regulations.

**Waste disposal number of waste from residues/unused products**

130110    OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters  
05, 12 and 19); waste hydraulic oils; mineral based non-chlorinated hydraulic oils  
Classified as hazardous waste.

**Contaminated packaging**

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

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**14. Transport information**

**Land transport (ADR/RID)**

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**Inland waterways transport**

**Marine transport**

**Air transport**

**Further Information**

No hazardous material as defined by the transport regulations.

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**15. Regulatory information**

**Labelling**

Additional advice on labelling                      According to EC-regulations the product is to be labelled as follows:

**Special labelling for certain preparations**

Safety data sheet available for professional user on request.

**National regulatory information**

Water contaminating class	2 - water contaminating
1999/13/EC (VOC)	25 - 50 %

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**16. Other information**

**Full text of R-phrases referred to under sections 2 and 3**

65                      Harmful: may cause lung damage if swallowed.

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

"(n.a. = not applicable; n.d. = not determined)"

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*