

MATERIAL SAFETY DATA SHEET
According to 91/155/EC

Printing date 24.03.2003

Reviewed on 04.03.2003

* 1 Identification of substance:

- Product details:
- Trade name: KÄLTEMASCHINEÖL BSE 170
- Application of the substance / the preparation: Lubricant

2 Composition/Data on components:

- Chemical characterization:
CAS No. Designation:
Synthetic ester
- Identification number(s): Composition

3 Hazards identification

- Hazard designation:
By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept.
- Information pertaining to particular dangers for man and environment
This product is water polluting; see item 12.
- Classification system
The classification and hazard designation are in line with current EC lists resulting of the so called conventional method of 88/379 EU concerning specific data of compounds.

4 First aid measures

- General information
Change clothes and shoes contaminated or soaked by the product.
Never put rags contaminated by the product into cloth-pockets.
- After inhalation
Supply fresh air; consult doctor in case of symptoms.
(eventually by inhaling the overheated product)
- After skin contact The product is not skin irritating.
- After eye contact
Rinse opened eye for several minutes under running water.
- After swallowing In case of persistent symptoms consult doctor.

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5 Fire fighting measures

- Suitable extinguishing agents
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Use fire fighting measures that suit the environment.
- For safety reasons unsuitable extinguishing agents
Water with a full water jet.
- Protective equipment:
In case of fire fighting: wear self containing breathing apparatus

6 Accidental release measures

- Person-related safety precautions:
Particular danger of slipping on leaked/ spilled product.
- Environmental protection measures:
Prevent from spreading (e.g. by binding or oil barriers).
Do not allow to enter the ground/ soil.
- Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the material collected according to regulations.
- Additional information: No dangerous materials are released.

7 Handling and storage

- Handling
- Information for safe handling: Prevent formation of aerosols.
- Information about protection against explosions and fires:
Do not heat up to temperatures close to the flash point.
- Storage
- Requirements to be met by storerooms and containers:
No special requirements.
- Information about storage in one common storage facility:
Store away from foodstuffs.
- Further information about storage conditions:
Local regulations concerning handling and storage of water polluting substances have to be followed.

* 8 Exposure controls and personal protection

- Additional information about design of technical systems:
No further data; see item 7.
- Components with critical values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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- Additional information:
The lists that were valid during the compilation were used as basis.
- Personal protective equipment
- General protective and hygienic measures
The usual precautionary measures should be adhered to in handling the chemicals and the mineral oil products.
Avoid close or long term contact with the skin.
Use skin protection cream for preventive skin protection.
Do not carry cleaning cloths impregnated with the product in trouser pockets.
- Breathing equipment: Not required.
- Protection of hands: Not required.
- Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Safety glasses recommended during refilling.
- Body protection: Protective work clothing.

9 Physical and chemical properties:

· General Information

- Form: Fluid
- Colour: Light yellow
- Smell: Nearly odourless

· Change in condition

- Melting point/Melting range: Not determined
- Boiling point/Boiling range: Not determined

· Flash point:

260 ° C ISO 2592

· Decomposition temperature:

Not determined

· Danger of explosion:

Product is not explosive.

· Density at 15 ° C

0.97 g/cm³ DIN 51 757

· Solubility in / Miscibility with Water:

Not miscible or difficult to mix

· Viscosity or Consistency-Class:

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· kinematic: at 40 ° C

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173 mm²/s DIN 51 562

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Dangerous reactions No dangerous reactions known
- Dangerous products of composition:
No dangerous decomposition products known

11 Toxicological information

- Acute toxicity:
- Primary irritant effect:
 - on the skin: No irritant effect known.
 - on the eye: No irritant effect known.
- Sensitization: No sensitizing effect known.
- Additional toxicological information:
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information:

- Behaviour in environmental systems:
- Mobility and bioaccumulation potential: No data available
- Ecotoxicological effects:
- Behaviour in sewage processing plants:
The product swims on the water surface.
- General notes:
German Water Endangering Class 1 (Self-assessment): slightly hazardous for water.
Do not allow to reach ground water, water bodies or sewage system.

* 13 Disposal considerations

- Product:
- Recommendation
Smaller quantities have to be disposed in line with local legislation.
When storing used mineral oil products, ensure that the categories for waste oil and mixing instructions are observed.
Delivery of waste oil only to officially authorized collectors.
- European waste catalogue
13 02 08: other engine, gear and lubricating oils
- Uncleaned packagings:
- Recommendation:
Empty contaminated packagings thoroughly. They can be recycled after

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thorough and proper cleaning. Small one-way packagings have to be disposed according to the local regulations.
EWC 15 01 99.

14 Transport information

- Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)
- ADR/RID-GGVS/E Class: -

- Maritime transport IMDG/GGVSea:
- IMDG/GGVSea Class: -

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -

- Transport/Additional information:
No dangerous good acc. to dangerous goods/ transport directions.

15 Regulatory information

- Designation according to EU guidelines:
Observe the normal safety regulations when handling chemicals or mineral oil products.
The product is not subject to identification regulations under EC Directives until 2001/59/EC (28. ATP) and the Ordinance on Hazardous Materials. The concentrations of the dangerous compounds, which are possibly specified under point 2, are not above the value for classification. Local regulations must be kept.

- National regulations

- German Water Hazard Class:
Water Enganging Class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

All ingredients are listed in the European Inventories. These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This data sheet is a safety data sheet according to 91/155/EU. For products which are not subject to classification according to EU lists this data sheet is made on a voluntary base.

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· Validity:

With this latest edition of this MSDS all former editions are not valid any longer.

Changed items are marked with "**".

- * Data compared to the previous version altered.