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1. Identification of the substance/mixture and of the company/undertaking

Product identifier
Trade name
MK-BO-TH

Relevant identified uses of the substance or mixture and uses advised against Mixture for industrial use:

Lubricating oil for slide-way lubrication

Details of the supplier of the safety data sheet Supplier / manufacturer

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Information on substance / mixture:

Product Safety Department

Phone: +49 (0) 721 569 68 10

E-Mail: info@muellerundkarle.de

Emergency telephone number: +49 (0) 721 569 68 10 and 0160 8240588

*2. Hazards identification

Classification of the mixture

Regulation (EC) No. 1272/2008 (EC-GHS)

Not classified as dangerous

Label elements

Regulation (EC) No. 1272/2008

Pictogram

not applicable

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Signal word not applicable

Hazard statements

not applicable

Precautionary statements

not applicable

Other hazards

Results of PBT and vPvB assessment

PBT: criteria not met vPvB: criteria not met

*3. Composition / information on ingredients

General designation of constituents

Mixture of contains distillates (petroleum) and additives

Dangerous constituents

Designation CAS-No. Concentration Classification*.

Does not contain ingredients in amounts that have to be declared

*4. First aid measures

Description of first aid measures

General notes

Remove contaminated, soaked clothing immediately.

Wash contaminated clothing before reuse.

After inhalation

Remove the person to fresh air and allow for unimpeded breathing.

After skin contact

Wash affected parts of the body with soap and water.

After eye contact

In the case of eye contact, hold open the eyelids and rinse with water for a sufficiently long time and then consult a doctor immediately.

^{*}The text of the H-phrases can be found in Chapter 16.

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After swallowing

Do NOT induce vomiting. Rinse out mouth immediately and drink plenty of water. Get medical attention

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

*5. Firefighting measures

Extinguishing media

Suitable extinguishing media

Foam, CO₂, dry powder extinguisher, fine spray.

Unsuitable extinguishing media

Jet of water

Special hazards from the substance or the actual product, its combustion products or gases produced CO_{x} , NO_{x} , SO_{x} , $H_{2}S$, phosphorous oxides

Advice for firefighters

Special protective equipment for fire-fighting

In the event of fire, use breathing apparatus suitable for any ambient conditions.

Fire residues and contaminated firefighting water must be disposed of according to official regulations.

*6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove sources of ignition.

Use personal protective equipment. Avoid skin and eye contact.

Attention, danger of slipping increased leaked product.

Environmental precautions

Do not allow product to get into surface waters, the sewage system or the soil. Inform competent authorities if product has drained into surface waters, the sewage system or into the soil.

Methods and material for containment and cleaning up

Wipe away liquid with absorbent material or remove by suction with universal binding agent and dispose of same in accordance with the regulations.

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*7. Handling and storage

Precautions for safe handling

Avoid unprotected skin contact, use gloves if necessary (e.g., nitrile rubber). Avoid forming of vapors and aerosols as far as possible. Ensure adequate ventilation, if necessary use local fume extraction equipment.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms/conditions

Protect from frost and heat. Store in closed containers.

Containers and filling equipment is to be handled/stored in such a manner that endangerment of water and soil from leakage of product can be excluded water.

Notes on mixed storage

Storage Class 10 – 13 (other combustible and non-combustibles materials, TRGS 510, Germany) (TRGS=Technical rules for hazardous substances).

Specific end uses

Formulation for industrial use Lubricating oil for slide-way lubrication

*8. Exposure controls / personal protection

Control parameters

Occupational exposure limits and / or biological limit values (BLV) Components with Occupational Exposure Limits (OEL)

Germany

CAS no. substance OEL limit-value remarks

The product contains no relevant quantities of individual substances with workplace-related limit values that have to be monitored

Recommended limiting values: mineral oil mist or 5 mg/m³ US-OSHA PEL-value 10 mg/m³ ACGIH STEL-value

Exposure controls

Protection and Hygiene measures

Protective measures when handling working substances are listed in TRGS 500.

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Keep away from food and drink. Do not put cleaning cloths saturated with product in your pockets. Wash your hands before breaks and meals. After work, use moisturizing skin cream. Observe workplace-related skin protection plan.

Personal protection equipment

Respiratory protection.

Not necessary with adequate ventilation.

Hand protection

Use protective gloves of suitable material (e.g., nitrile rubber, penetration time >480 min) tested according to EN 374.

Use suitable skin protection cream that is not dissolved by oil if gloves cannot be worn. Observe skin protection plan.

Eye protection

Wear protective goggles with side protection if there is a risk of splashing.

Skin protection

Wear industrial clothing.

Environmental exposure controls

See data in Point 6.

*9. Physical and chemical properties

Information on the basic physical and chemical properties

Form liquid

Color yellow-brown

Odor typical

pH-value (g/l water, 20°C) not applicable

Melting range not determined °C

Boiling point / boiling range not determined °C

Flammability > 200 °C

Ignition temperature not determined °C

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Vapour pressure (20°C) < 0.01 hPa Density (20°C) 860-885 kg/m³ Water solubility (20°C) practically insoluble g/l Partition coefficient: n-octanol/water (log Pow) not determined Viscosity, kinematic (40°C) 32-220 mm²/s

*10. Stability and reactivity

Conditions to avoid

Substance is stable when handled for the intended purpose under the usual conditions of use. Observe notes on storage.

Hazardous decomposition products Powerful oxidizing agents

Hazardous decomposition products

In the event of fire: CO_x, NO_x, SO_x, H₂S, phosphorous oxides

11. Toxicological information

Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Skin / eye corrosion / irritation

Based on available data, the classification criteria are not met.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Skin sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

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Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are met.

12. Ecological information

Toxicity

Aquatic toxicity

Based on available data, the classification criteria are not met.

Persistence and degradability

No details available

Bioaccumulative potential

No details available

Mobility in soil

No details available

Results of PBT and vPvB assessment

No details available

Other adverse effects

The product is a water-endangering liquid – do not allow product to get into surface waters, the sewage system or the soil.

13. Disposal considerations

Waste treatment methods

Product

Pass to approved waste-disposal company with due observance of official local regulations.

EU waste codes

13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils

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Contaminated packaging

Completely empty containers. Pass to an approved waste-disposal company. Drums and IBCs can be reconditioned. Cleaning by recycling company.

14. Transport information

Not a hazardous substance as defined by ADR, RID, IMDG, ADNR, ICAO/IATA

15. Regulatory information

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

EC regulations

Details concerning Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL): none

National regulations (Germany)

Water endangerment class

WGK 1 (slight water pollutant, classification according to AwSV – Regulation on installations for the treatment of water-endangering substances)

16. Other information

Methods used in accordance with Article 9 of Regulation (EC) No 1272/2008 to assess the information for classification purposes:

Physical hazards: evaluation of test data (flash point) Health and environmental hazards: calculation method

Updating service

Updated chapters are marked with an*.

Details are based on our present knowledge. They describe our products with reference to safety requirements and are therefore not to be interpreted as promising certain properties.