

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

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

Trade name: **linelube Fire Retardant Hydraulic Oil ISO 46**

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

- Use of the substance/mixture: Fire-resistant hydraulic fluid.

Supplier:

Online Lubricants Ltd.
Unit 20, The IO Centre, Barking, London IG11 0DR
UK Tel. +44 (0) 208 507 0123

In case of emergency: **+44 (0) 208 507 0123**

2 Hazards identification

2.1. Classification of the substance or mixture

- REGULATION (EC) No 1272/2008: For the full text of the H-Statements mentioned in this Section, see Section 2.2.
- Classification: The product is not classified as dangerous according to Regulation (EC) No. 1272/2008
- DIRECTIVE 67/548/EEC or 1999/45/EC:
 - For the full text of the R-phrases mentioned in this Section, see Section 16.
 - The substance/mixture is non-dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments.
 - Symbol(s) Not classified

2.2. Label elements

- Labelled according to REGULATION (EC) No 1272/2008
 - Hazard Statements None
 - Precautionary statements None
 - Supplemental Hazard Statements: EUH210 - Safety data sheet available on request

2.3. Other hazards

- Environmental properties: Contaminated surfaces will be extremely slippery.

3 Composition / Information on ingredients

3.2. Mixture

- Hazardous components:
- Chemical Name:
- Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C13-15-branched and linear alkyl esters
 - EC-No: 413-750-2
 - REACH Registration Number: no data available
 - CAS-No: 171090-93-0
 - Weight % > 5
 - Classification (Dir. 67/548): R53
 - GHS Classification: Aquatic Chronic 4 (H413)
- Additional information The product is made from synthetic base oils
- For the full text of the R-phrases mentioned in this Section, see Section 16.
- For the full text of the H-Statements mentioned in this Section, see Section 16

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4 First-aid measures

4.1. Description of first aid measures

- General advice:
 - IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
 - Eye contact Rinse thoroughly with plenty of water, also under the eyelids.
 - Skin contact: Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. In this case, the casualty should be sent immediately to hospital.
 - Inhalation Move to fresh air.
 - Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.
- **4.2. Most important symptoms and effects, both acute and delayed**
 - Eye contact Not classified.
 - Skin contact Not classified. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
 - Inhalation Not classified. Inhalation of vapours in high concentration may cause irritation of respiratory system.
 - Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
- **4.3. Indication of immediate medical attention and special treatment needed, if necessary**
 - Notes to physician: Treat symptomatically

5 Fire Fighting Measures

5.1. Extinguishing media

- Suitable extinguishing media
 - Carbon dioxide (CO₂). ABC powder. Foam. Water spray or fog.
- Unsuitable Extinguishing Media:
 - Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

- Special hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

5.3. Precautions for fire-fighters

- Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective suit.
- Other information:
 - Cool containers / tanks with water spray.
 - Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6 Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

- General Information:
 - Do not touch or walk through spilled material.
 - Contaminated surfaces will be extremely slippery.
 - Use personal protective equipment.
 - Ensure adequate ventilation.
 - Remove all sources of ignition.

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6.2. Environmental precautions:

- General Information
 - Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

- Dam up. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4. Reference to other sections:

- Personal protective equipment See Section 8 for more detail.
- Waste treatment See section 13.

7 Handling and Storage

7.1. Precautions for safe handling

- Advice on safe handling
 - When using, do not eat, drink or smoke.
 - For personal protection see section 8.
 - Use only in well-ventilated areas.
 - Do not breathe vapours or spray mist.
 - Avoid contact with skin, eyes and clothing.
- Prevention of fire and explosion:
 - Take precautionary measures against static discharges. Ground/bond containers, tanks and transfer/receiving equipment.
- Hygiene measures
 - Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product.
 - Regular cleaning of equipment, work area and clothing is recommended.
 - Wash hands before breaks and immediately after handling the product.
 - Do not use abrasives, solvents or fuels.
 - Do not dry hands with rags that have been contaminated with product.
 - Do not put product contaminated rags into workwear pockets.

7.2 Conditions for safe storage, including any incompatibilities

- Technical measures/Storage conditions
 - Keep away from food, drink and animal feeding stuffs. Keep in a bonded area. Keep container tightly closed. Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture. Materials to avoid Strong oxidising agents. 7.3. Specific use(s) Specific use(s) No information available.

8 Exposure controls/personal protection

8.1. Control parameters:

- Exposure limits Do not contain substance with European workplace exposure limits in concentration above regulatory thresholds. Legend See section 16

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8.2. Exposure controls:

- Occupational Exposure Controls
 - Engineering measures Apply technical measures to comply with the occupational exposure limits.
 - When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.
- Personal protective equipment
 - General Information: If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.
 - Respiratory protection: None under normal use conditions. In case of vapours and aerosol formation: Respirator with combination filter for vapour/particulate (EN 14387). Type A/P1. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.
 - Eye protection: If splashes are likely to occur, wear: Safety glasses with side-shields.
 - Skin and body protection: Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing. Hand protection Impervious gloves: Fluorinated rubber, Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves
- Environmental exposure controls:
 - General Information The product should not be allowed to enter drains, water courses or the soil.

9 Physical and Chemical Properties

- Colour: beige
- Physical state @20°C: solid
- Odour: characteristic
- pH: Not applicable
- Boiling point/boiling range: No information available
- Flash point: 310 °C 590 °F ISO 2592
- Evaporation rate: No information available
- Flammability Limits in Air: No information available
- Vapour pressure: No information available
- Vapour density: No information available
- Density: 920 kg/m³ @ 15 °C ISO 3675
- Water solubility: Insoluble
- Solubility in other solvents: No information available
- logPow: No information available
- Autoignition temperature: > 420 °C > 788 °F ASTM 2155
- Viscosity, kinematic: 47.5 mm²/s @ 40 °C ISO 3104
- Explosive properties: Not explosive
- Oxidising properties: Not applicable
- Possibility of hazardous reactions: Not applicable

9.2. Other information No information available

10 Stability and Reactivity

- 10.1. Reactivity:** No information available.
- 10.2. Chemical stability:** Stable under recommended storage conditions.
- 10.3. Possibility of hazardous reactions:** None under normal processing.
- 10.4. Conditions to Avoid:** Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.
- 10.5. Incompatible materials:** Avoid Strong oxidising agents.
- 10.6. Hazardous Decomposition Products:** None under normal use.

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11 Toxicological Information

11.1. Information on toxicological effects:

- Acute toxicity Local effects Product Information:
 - Skin contact. Not classified. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
 - Eye contact. Not classified.
 - Inhalation. Not classified. Inhalation of vapours in high concentration may cause irritation of respiratory system.
 - Ingestion. Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
- Acute toxicity - Component Information:
 - Chemical Name: Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C13-15-branched and linear alkyl esters
 - LD50 Oral: > 5000 mg/kg (Rat)
 - LD50 Dermal: > 2000 mg/kg (Rat)
 - LC50 Inhalation > 7.53 mg/l (Rat) (4h)
- Sensitisation: Not classified as a sensitizer.
- Specific effects:
 - Carcinogenicity This product is not classified carcinogenic.
 - Mutagenicity This product is not classified as mutagenic.
 - Reproductive toxicity This product does not present any known or suspected reproductive hazards.
- Repeated Dose Toxicity
 - Subchronic Toxicity No information available
- Target Organ Effects (STOT): No information available.
- Other information:
 - Other adverse effects Characteristic skin lesions (oil blisters) may develop following prolonged and repeated exposures (contact with contaminated clothing).

12 Ecological Information

12.1. Toxicity: Not classified.

- Acute aquatic toxicity - Product Information: No information available.
- Acute aquatic toxicity - Component Information
- Chemical Name: Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4- hydroxy-, C13-15-branched and linear alkyl esters - 171090-93-0
 - Toxicity to algae: None Specified
 - Toxicity to daphnia and other aquatic invertebrates: EC50 (48h) > 0.33 mg/l.
 - Toxicity to fish: LC50 (96h) > 0.33 mg/l
 - Toxicity to microorganisms: None Specified
- Chronic aquatic toxicity - Product Information No information available.
- Chronic aquatic toxicity - Component Information No information available.
- Effects on terrestrial organisms No information available

12.2. Persistence and Degradability General Information Product is biodegradable, OECD 301B.

12.3. Bioaccumulative potential

- Product Information No information available.
- logPow No information available
- Component Information o information available.
- Chemical Name:
 - Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C13-15-branched and linear alkyl esters - 171090-93-0
 - log Pow 3.56

12.4. Mobility in soil

- Soil: Given its physical and chemical characteristics, the product generally shows low soil mobility.
- Air: Loss by evaporation is limited.
- Water: The product is insoluble and floats on water.

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12.5. Results of PBT and vPvB assessment: No information available.
12.6. Other adverse effects General Information: No information available

13 Disposal Considerations

13.1. Waste treatment methods:

- Waste from residues / unused products
 - Should not be released into the environment. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
- Contaminated packaging:
 - Empty containers should be taken to an approved waste handling site for recycling or disposal.
- EWC Waste Disposal No.
- The following Waste Codes are only suggestions: 13 01 11, 13 01 12. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14 Transport Information

- **ADR/RID** not regulated
- **IMDG/IMO** not regulated
- **ICAO/IATA** not regulated
- **ADN** not regulated

15 Regulatory Information

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

- European Union No information available
- International Inventories No information available
- Further information No information available

15.2. Chemical Safety Assessment: No information available

15.3. National regulatory information

- The United Kingdom Avoid exceeding occupational exposure limits (see section 8)
- Ireland Avoid exceeding occupational exposure limits (see section 8)

16 Other Information

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

- R53 - May cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

- H413 - May cause long lasting harmful effects to aquatic life
- Abbreviations, acronyms
- Legend Section 8

TWA: Time Weight Average

STEL: Short Time Exposure Limit

+ Sensitiser

* Skin designation

** Hazard Designation

C: Carcinogen

M: Mutagen

R: Toxic to reproduction