

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: SILKOLENE UNIV BRAKE/CLUTCH

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

Identified uses: Brake fluid

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier FUCHS LUBRICANTS (UK) PLC.
New Century Street
ST1 5HU Hanley

Telephone: +44 (0) 1782 203700

Contact Person: Product Safety department

E-mail: product.safety@fuchs.com
Telephone: +44 (0) 1782 203700

1.4 Emergency telephone number: UK NHS: Dial 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation GB-CLP.

Classification according to GB-CLP.

Health Hazards

Serious eye irritation Category 2 H319: Causes serious eye irritation.

Toxic to reproduction Category 2 H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Contains: Alkyl diglycole
Triethylene glycol monomethyl ether borate

Product name: SILKOLENE UNIV BRAKE/CLUTCH



Signal Words: Warning

Hazard Statement(s): H319: Causes serious eye irritation.
H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

Precautionary Statements

Prevention: P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

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.

2.3 Other hazards: 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information:

Chemical name	Identifier	Concentration *	UK-REACH Registration No.	Notes
Glycol derivative	EINECS: 205-592-6	30,00% - <50,00%		
Triethylene glycol monomethyl ether borate	EINECS: 250-418-4	20,00% - <50,00%		
Diglycol	EINECS: 203-872-2	10,00% - <25,00%		
3,6,9,12-tetraoxahexadecan-1-ol	EINECS: 216-322-1	5,00% - <10,00%		
Glycol derivative	EINECS: 203-961-6	1,00% - <5,00%		
Alkyl diglycole	EINECS: 203-906-6	0,10% - <1,00%		

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Product name: SILKOLENE UNIV BRAKE/CLUTCH

Classification

Chemical name	Identifier	Classification
Glycol derivative	EINECS: 205-592-6	GBCLP: Eye Dam. 1;H318
Triethylene glycol monomethyl ether borate	EINECS: 250-418-4	GBCLP: Repr. 2;H361d
Diglycol	EINECS: 203-872-2	GBCLP: Acute Tox. 4;H302
3,6,9,12-tetraoxahexadecan-1-ol	EINECS: 216-322-1	GBCLP: Eye Irrit. 2;H319
Glycol derivative	EINECS: 203-961-6	GBCLP: Eye Irrit. 2;H319
Alkyl diglycole	EINECS: 203-906-6	GBCLP: Repr. 2;H361d

GB-CLP

specific concentration limit

Chemical name	Identifier	specific concentration limit	Hazard class	Hazard Category	Hazard statements
Glycol derivative	EINECS: 205-592-6	$\geq 30\%$	Serious eye damage	1	H318
		$20 - < 30\%$	Serious eye irritation	2	H319

For the wording of the listed hazard statements refer to section 16.

SECTION 4: First aid measures
General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures
Inhalation: Supply fresh air; consult doctor in case of symptoms.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Skin Contact: Wash with soap and water.

Ingestion: Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed Get medical attention if symptoms occur.

SECTION 5: Firefighting measures
5.1 Extinguishing media
Suitable extinguishing media: CO₂, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added

Product name: SILKOLENE UNIV BRAKE/CLUTCH

Unsuitable extinguishing media: Water with a full water jet.

5.2 Special hazards arising from the substance or mixture: During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire-fighting procedures: Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: In case of spills, beware of slippery floors and surfaces. Keep away from sources of ignition - No smoking.

6.2 Environmental Precautions: Prevent from spreading (e.g. by binding or oil barriers). Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

6.4 Reference to other sections: See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Avoid contact with eyes. Wash hands thoroughly after handling. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Prevent formation of aerosols. Observe good industrial hygiene practices. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities: Store locked up.

7.3 Specific end use(s): Not applicable

Product name: SILKOLENE UNIV BRAKE/CLUTCH

Storage Class: 10, Combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Diglycol	TWA	23 ppm 101 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
Glycol derivative	TWA	10 ppm 67,5 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
Glycol derivative	STEL	15 ppm 101,2 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)
Alkyl diglycole	TWA	10 ppm 50,1 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011)

8.2 Exposure controls

Appropriate engineering controls:

Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information:

Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

Eye/face protection:

Safety glasses (EN 166) recommended during refilling. Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.

Skin protection

Hand Protection:

Material: Nitrile butyl rubber (NBR).
Min. Breakthrough time: ≥ 480 min
Recommended thickness of the material: $\geq 0,38$ mm

Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other:

Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

Respiratory Protection:

Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.

Product name: SILKOLENE UNIV BRAKE/CLUTCH

Thermal hazards: Not known.

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: liquid

Form: liquid

Color: Pale amber

Odor: Characteristic

pH: 8,5 (100 %, 20 °C)

Freezing point: not determined

Boiling Point: not determined

Flash Point: > 93 °C

Evaporation Rate: Not applicable for mixtures

Flammability (solid, gas): not determined

Flammability Limit - Upper (%)—: Not applicable for mixtures

Flammability Limit - Lower (%)—: Not applicable for mixtures

Vapor pressure: Not applicable for mixtures

Relative vapor density: Not applicable for mixtures

Density: 1,01 g/cm³ (15 °C)

Solubility(ies)

Solubility in Water: Soluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water): Not applicable for mixtures

Autoignition Temperature: not determined

Decomposition Temperature: not determined

Flow time Value not relevant for classification

Explosive properties: Value not relevant for classification

Oxidizing properties: Value not relevant for classification

Particle characteristics: Not applicable

9.2 Other information No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity: Stable under normal use conditions.

10.2 Chemical Stability: Stable under normal use conditions.

Product name: SILKOLENE UNIV BRAKE/CLUTCH

10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Stable under normal use conditions.
10.5 Incompatible Materials:	Strong oxidizing substances. Strong acids. Strong bases.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	Causes eye irritation.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	ATEmix: 8.615 mg/kg
Specified substance(s)	
Glycol derivative	LD 50 (Rat): 6.730 mg/kg
Diglycol	LD 50 (Rat): 12.565 mg/kg LD 50 (Human): 1.120 mg/kg
Glycol derivative	LD 50 (Rat): 3.384 mg/kg
Alkyl diglycole	LD 50 (Rat): 9.210 mg/kg

Dermal

Product:	ATEmix: 43.333 mg/kg ATEmix: 68.421,05 mg/kg
Specified substance(s)	
Glycol derivative	LD 50 (Rabbit): 3.540 mg/kg
Diglycol	LD 50 (Rabbit): 11.890 mg/kg
Glycol derivative	LD 50 (Rabbit): 2.700 mg/kg
Alkyl diglycole	LD 50 (Rabbit): 650 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
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Product name: SILKOLENE UNIV BRAKE/CLUTCH

Skin Corrosion/Irritation:

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

Specified substance(s)

Triethylene glycol OECD 404 (Rabbit):
monomethyl ether borate Not irritant.

Diglycol OECD 404 (Rabbit):
Not irritant.

Serious Eye Damage/Eye Irritation:

Product: Based on available data, the classification criteria are met.

Specified substance(s)

Triethylene glycol OECD 405 (Rabbit):
monomethyl ether borate Not irritant.

Respiratory or Skin Sensitization:

Product: Skin sensitizer: Based on available data, the classification criteria are not met.
Respiratory sensitizer: Based on available data, the classification criteria are not met.

Specified substance(s)

Triethylene glycol
monomethyl ether borate No sensitizing effect (guinea pig); OECD 406

Diglycol
No sensitizing effect (guinea pig); OECD 406

Germ Cell Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Product: Based on available data, the classification criteria are met.

Specific Target Organ Toxicity - Single Exposure

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

Specific Target Organ Toxicity - Repeated Exposure

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

Aspiration Hazard

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

Other adverse effects: No data available.

Product name: SILKOLENE UNIV BRAKE/CLUTCH

SECTION 12: Ecological information

General information: Not applicable Not applicable

12.1 Toxicity

Acute toxicity

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

Fish

Specified substance(s)

Glycol derivative	LC 50 (Fathead minnow (<i>Pimephales promelas</i>), 96 h): 2.400 mg/l
Triethylene glycol monomethyl ether borate	LC 50 (Fish, 96 h): > 222,2 mg/l (OECD 203)
Diglycol	LC 50 (Fish, 96 h): > 32.000 mg/l
Glycol derivative	LC 50 (Fish, 96 h): 1.300 mg/l

Aquatic Invertebrates

Specified substance(s)

Glycol derivative	EC 50 (Water Flea, 48 h): > 500 mg/l
Triethylene glycol monomethyl ether borate	EC 50 (Water Flea, 48 h): > 211,2 mg/l (OECD 202)
Diglycol	EC 50 (Water Flea, 48 h): > 10.000 mg/l
Glycol derivative	EC 50 (Water Flea, 48 h): > 101 mg/l

Chronic Toxicity

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

Toxicity to Aquatic Plants

Specified substance(s)

Glycol derivative	EC 50 (Alga, 72 h): 612,6 mg/l
Triethylene glycol monomethyl ether borate	EC 50 (Alga, 72 h): > 224,4 mg/l (OECD 201)
3,6,9,12-tetraoxahexadecan-1-ol	EC 50 (Alga, 96 h): > 100 mg/l
Glycol derivative	EC 50 (Alga, 96 h): > 101 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures

Product name: SILKOLENE UNIV BRAKE/CLUTCH

Specified substance(s)

Triethylene glycol > 70 % (10 d, OECD 301A)
monomethyl ether borate

Diglycol 92 % (28 d, OECD 301A)

12.3 Bioaccumulative potential

Product: Not applicable for mixtures

12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Other adverse effects:

No data available.

Water Hazard Class (WGK):

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

List of Waste (LoW) Codes

13 01 11*: synthetic hydraulic oils

SECTION 14: Transport information

ADR/RID

- | | |
|------------------------------------|---------------------|
| 14.1 UN number or ID number: | — |
| 14.2 UN Proper Shipping Name: | — |
| 14.3 Transport Hazard Class(es) | |
| Class: | Non-dangerous goods |
| Label(s): | — |
| Hazard No. (ADR): | — |
| Tunnel restriction code: | — |
| 14.4 Packing Group: | — |
| 14.5 Environmental hazards: | — |
| 14.6 Special precautions for user: | — |

Product name: SILKOLENE UNIV BRAKE/CLUTCH

IMDG

- | | |
|------------------------------------|---------------------|
| 14.1 UN number or ID number: | — |
| 14.2 UN Proper Shipping Name: | — |
| 14.3 Transport Hazard Class(es) | |
| Class: | Non-dangerous goods |
| Label(s): | — |
| EmS No.: | — |
| 14.3 Packing Group: | — |
| 14.5 Environmental hazards: | — |
| 14.6 Special precautions for user: | — |

IATA

- | | |
|------------------------------------|---------------------|
| 14.1 UN number or ID number: | — |
| 14.2 Proper Shipping Name: | — |
| 14.3 Transport Hazard Class(es): | |
| Class: | Non-dangerous goods |
| Label(s): | — |
| 14.4 Packing Group: | — |
| 14.5 Environmental hazards: | — |
| 14.6 Special precautions for user: | — |

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

SECTION 15: Regulatory information

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

GB Regulations

The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019:
none

The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020:
none

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

DIRECTIVE Control of Major Accident Hazards Regulations 2015:

The product does not fall into the scope of the Control of Major Accident Hazards Regulations 2015.

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Product name: SILKOLENE UNIV BRAKE/CLUTCH

Wording of the H-statements in section 2 and 3

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.

Other information:

The classification complies with the current GB lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: On the basis of test data; Calculation Method; Bridging Principle "Substantially similar mixtures"; Expert Judgement

Revision Date:

12.06.2023

Disclaimer:

The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.