

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: URETHYN XHD 2

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

Identified uses: Lubricant

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier FUCHS LUBRICANTS GERMANY GmbH
Friesenheimer Str. 19
68169 Mannheim
Telephone: +49 621 3701-0 (ZENTRALE)
Fax: +49 621 3701-570

Contact for request of safety data sheets

E-mail: Automotive lubricants CS.Services-FLG@fuchs.com
Industrial lubricants
Telephone: +49 621 3701-0 (ZENTRALE)

Informing department for safety data sheets

E-mail: produktsicherheit-FLG@fuchs.com

1.4 Emergency telephone number: +49 621 3701-0 (Mo - Fr 08:00 - 16:00 Uhr)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Environmental Hazards

Chronic hazards to the aquatic environment	Category 3	H412: Harmful to aquatic life with long lasting effects.
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Product name: URETHYN XHD 2

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Hazard Statement(s): H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P273: Avoid release to the environment.

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.

Supplemental label information

EUH208: Contains: Ca sulfonate, Na sulphonate. May produce an allergic reaction.

2.3 Information on other hazards

By handling of chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

Endocrine disrupting properties

This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Contains:
Triphenyl phosphate

Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of the substances listed below with harmless additions.

Product name: URETHYN XHD 2

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
Ca sulfonate	EINECS: 939-603-7	0,10% - <1,00%	01-2119978241-36	
cycl. phosphine derivative, antioxidant	EINECS: 247-952-5	0,25% - <1,00%	01-2119977073-34	
Fatty alcohol, ethoxylated	Polymer	0,10% - <1,00%		
Na sulphonate	EINECS: 285-597-8	0,10% - <1,00%	01-2119985162-35	
Triphenyl phosphate	EINECS: 204-112-2	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.

** Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Classification

Chemical name	Identifier	Classification	
Ca sulfonate	EINECS: 939-603-7	CLP:	Skin Sens. 1B;H317
cycl. phosphine derivative, antioxidant	EINECS: 247-952-5	CLP:	Aquatic Chronic 1;H410; M-Factor (aquatic chronic): 1
Fatty alcohol, ethoxylated	Polymer	CLP:	Eye Dam. 1;H318, Acute Tox. 4;H302
Na sulphonate	EINECS: 285-597-8	CLP:	Skin Sens. 1B;H317
Triphenyl phosphate	EINECS: 204-112-2	CLP:	Aquatic Chronic 2;H411

CLP: Regulation No. 1272/2008.

specific concentration limit

Chemical name	Identifier	specific concentration limit	Hazard class	Hazard Category	Hazard statements
Ca sulfonate	EINECS: 939-603-7	>= 10 %	Skin sensitizer	1B	H317

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

Endocrine disrupting properties:

Triphenyl phosphate	Endocrine disrupting properties (Article 57(f) - environment)
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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: Promptly wash eyes with plenty of water while lifting the eye lids.

Skin Contact: Wash with soap and water.

Ingestion: Rinse mouth thoroughly.

Product name: URETHYN XHD 2

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| 4.2 Most important symptoms and effects, both acute and delayed: | May cause skin and eye irritation. |
| 4.3 Indication of any immediate medical attention and special treatment needed | Get medical attention if symptoms occur. Get medical attention if symptoms occur. |

SECTION 5: Firefighting measures

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|---|---|
| 5.1 Extinguishing media | |
| Suitable extinguishing media: | CO ₂ , fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added |
| 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

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|---|---|
| 6.1 Personal precautions, protective equipment and emergency procedures: | In case of spills, beware of slippery floors and surfaces. Not required. |
| 6.2 Environmental Precautions: | Avoid release to the environment. Prevent further leakage or spillage if safe to do so. |
| 6.3 Methods and material for containment and cleaning up: | Scrape up spillage or absorb with absorbing material. 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. |

Product name: URETHYN XHD 2

SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** Provide adequate ventilation. Observe good industrial hygiene practices. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products.
- 7.2 Conditions for safe storage, including any incompatibilities:** Local regulations concerning handling and storage of waterpolluting products have to be followed.
- 7.3 Specific end use(s):** Not applicable
- Storage Class:** 11, Combustible solids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Triphenyl phosphate - Inhalable fraction.	AGW	12,5 mg/m3	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (04 2021)

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 (PPE)

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.

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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. Protective gloves, where permitted in acc. to safety directions. 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:

Not relevant, due to the form of the product.

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:	solid
Form:	Paste
Color:	Light brown
Odor:	Characteristic
pH:	substance/mixture is non-soluble (in water)
Drop Point:	not determined
Boiling Point:	not determined
Flash Point:	Not applicable
Flammability (solid, gas):	not determined
Explosion Limit - Upper (%):	Not applicable for mixtures
Explosion Limit - Lower (%):	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Relative vapor density:	Not applicable for mixtures
Density:	0,86 g/cm ³ (20 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water

Product name: URETHYN XHD 2

Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Auto-ignition temperature:	not determined
Decomposition Temperature:	not determined
NLGI:	2
Particle characteristics:	Study technically not feasible
9.2 Other information	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	Stable under normal temperature conditions and recommended use.
10.2 Chemical Stability:	No data available.
10.3 Possibility of hazardous reactions:	None under normal conditions.
10.4 Conditions to avoid:	Keep away from heat, sparks and open flame.
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

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Oral

Product:	ATEmix: 80.808 mg/kg
Specified substance(s)	
Ca sulfonate	LD 50 (Rat): > 5.000 mg/kg
cycl. phosphine derivative, antioxidant	LD 50 (Rat): > 5.000 mg/kg
Fatty alcohol, ethoxylated	LD 50 (Rat): > 200 - 2.000 mg/kg
Na sulphonate	LD 50 (Rat): > 5.000 mg/kg

Product name: URETHYN XHD 2

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Ca sulfonate LD 50 (Rabbit): > 5.000 mg/kg

Na sulphonate LD 50 (Rat): > 5.000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Ca sulfonate LC 50 (Rat, 4 h): > 5 mg/l Dust and mist

Skin Corrosion/Irritation:

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

Serious Eye Damage/Eye Irritation:

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

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)

Ca sulfonate (Guinea Pig)
May cause sensitization by skin contact.

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 not 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.

11.2 Information on other hazards

Product name: URETHYN XHD 2

Endocrine disrupting properties

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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)

Ca sulfonate LC 50 (Fish, 96 h): > 101 mg/l (OECD 203)

Fatty alcohol, ethoxylated LC 50 (Fish, 96 h): 1,1 mg/l

Aquatic Invertebrates

Specified substance(s)

Ca sulfonate EC 50 (Water Flea, 48 h): > 1.001 mg/l (OECD 202)

Fatty alcohol, ethoxylated EC 50 (Water Flea, 48 h): 1,1 mg/l

Na sulphonate LC 50 (Water Flea, 48 h): > 1.000 mg/l

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

Toxicity to Aquatic Plants

Specified substance(s)

Ca sulfonate EC 50 (Alga, 72 h): > 101 mg/l (OECD 201)

Na sulphonate EC 50 (Alga, 96 h): > 1.000 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures

Specified substance(s)

Na sulphonate 8 % (28 d) Not easily biodegradable

12.3 Bioaccumulative potential

Product: Not applicable for mixtures

12.4 Mobility in soil:

Product: Not applicable for mixtures

Product name: URETHYN XHD 2

12.5 Results of PBT and vPvB assessment: The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Endocrine disrupting properties

Product: This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Specified substance(s)
Triphenyl phosphate The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

12.7 Other adverse effects: Harmful to aquatic life with long lasting effects.

Water Hazard Class (WGK): WGK 1: slightly water-endangering.

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.

European Waste Codes

12 01 12*: spent waxes and fats

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: —

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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 Maritime transport in bulk according to IMO instruments: Not applicable.

SECTION 15: Regulatory information

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

EU Regulations

EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended

synthetic polymer microparticles (SPM) content:0,01-<3%PTFE

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

EU. Ozone Depleters, Annex I to Regulation 2024/590 on Substances that Deplete the Ozone Layer:
none

EU. Ozone Depleters, Annex I to Regulation 2024/590 on Substances that Deplete the Ozone Layer:
none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

Product name: URETHYN XHD 2

National Regulations

Water Hazard Class (WGK): WGK 1: slightly water-endangering.

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

DIRECTIVE 2012/18/EU (SEVESO III) on the control of major-accident hazards involving dangerous substances

Not applicable

SECTION 16: Other information

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

Wording of the H-statements in section 2 and 3

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Other information: The classification complies with the current EU 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: 01.10.2025

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.

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways;
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory

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of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative