

SAFETY DATA SHEET

acc.to ISO/DIS 11014 for USA

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: RENOLIT LX-OTP 2

Other means of identification: For further information, please refer to section 9 of the SDS.

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

Identified uses: Lubricating grease

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Fuchs Schmierstoffe GmbH
Friesenheimer Str. 19
68169 Mannheim

US Distributor

Fuchs Lubricants Co.
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Harvey, IL 60426

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1.4 US contact telephone :

708-333-8900

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800-255-3924

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to the legislation in force.

Health Hazards

Respiratory sensitizer Category 1

Skin sensitizer Category 1

Toxic to reproduction Category 2

Environmental Hazards

Chronic hazards to the aquatic environment Category 3

Hazard summary

Physical Hazards: No data available.

Product name: RENOLIT LX-OTP 2

2.2 Label Elements



Signal Words: Danger

Hazard Statement(s): H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317: May cause an allergic skin reaction.
H361: Suspected of damaging fertility or the unborn child.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P284: [In case of inadequate ventilation] wear respiratory protection.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P281: Use personal protective equipment as required.
P273: Avoid release to the environment.

Response: P304+P341: If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P321: Specific treatment (see on this label).

Storage: P405: Store locked up.

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. The product may not be released into the environment without control.

Unknown toxicity: Due to information available product does not contain any ingredients of unknown toxicity.

Product name: RENOLIT LX-OTP 2

3 COMPOSITION / INFORMATION ON INGREDIENTS

General information: Lubricating grease: Thickener system and additives in synthetic base oil.

Chemical name	Identifier	Concentration *	Notes
Dilithium azelate	38900-29-7	5.00 - <10.00%	
ZnDTP	4259-15-8	1.00 - <2.50%	
carboxylic acid zinc salt	84418-50-8	0.10 - <1.00%	
Zn-Octoate	85203-81-2	0.10 - <1.00%	
phenolic antioxidant	128-37-0	0.10 - <1.00%	
Thiadiazole derivative	72676-55-2	0.10 - <1.00%	
DEA	111-42-2	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.

Classification

Chemical name	Identifier	Classification
Dilithium azelate	38900-29-7	Acute Tox. 4;H302
ZnDTP	4259-15-8	Eye Dam. 1;H318, Aquatic Chronic 2;H411
carboxylic acid zinc salt	84418-50-8	Aquatic Chronic 3;H412, Skin Sens. 1A;H317, Resp. Sens. 1;H334
Zn-Octoate	85203-81-2	Repr. 2;H361d, Eye Irrit. 2;H319, Aquatic Chronic 3;H412
phenolic antioxidant	128-37-0	Aquatic Acute 1;H400, Aquatic Chronic 1;H410
Thiadiazole derivative	72676-55-2	Skin Sens. 1B;H317, Aquatic Chronic 2;H411
DEA	111-42-2	Acute Tox. 4;H302, STOT RE 2;H373, Skin Irrit. 2;H315, Eye Dam. 1;H318, Aquatic Chronic 3;H412

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: Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

Ingestion: Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: Suspected to cause hypersensitivity and allergy.

Product name: RENOLIT LX-OTP 2

4.3 Indication of any immediate medical attention and special treatment needed Symptoms may be delayed.

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

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: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

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.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Avoid contact with eyes, skin, and clothing. 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.

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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

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1.Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
DEA	TWA	3 ppm 15 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
DEA - Inhalable fraction and vapor.	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (02 2012)

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-butadiene rubber (NBR).
 Min. Breakthrough time: ≥ 480 min
 Recommended thickness of the material: ≥ 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: Not relevant, due to the form of the product.

Thermal hazards: No data available.

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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.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	solid
Form:	Paste
Color:	Light brown
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	Not applicable
Freezing point:	Not applicable for mixtures
Boiling Point:	Not applicable
Flash Point:	200 °C
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)—:	Not applicable for mixtures
Flammability Limit - Lower (%)—:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Vapor density (air=1):	Not applicable for mixtures
Density:	1.15 g/ml (15.00 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	Value not relevant for classification
Decomposition Temperature:	Value not relevant for classification
NLGI:	2
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
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.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.

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- 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.

11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

- Inhalation:** No data available.
- Ingestion:** No data available.
- Skin Contact:** May cause an allergic skin reaction.
- Eye contact:** No data available.

Acute toxicity

Oral

- Product:** ATEmix: 37,600.35 mg/kg
- Specified substance(s)**
- Dilithium azelate LD 50 (Rat): 2,000 mg/kg (OECD 420)
- ZnDTP LD 50 (Rat): 4,358 mg/kg
- phenolic antioxidant LD 50 (Rat): 2,930 mg/kg (OECD 401)
- DEA LD 50 (Rat): 1,600 mg/kg

Dermal

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
- ZnDTP LD 50 (Rabbit): > 5,000 mg/kg (OECD 402)
- phenolic antioxidant LD 50 (Rat): > 5,000 mg/kg (OECD 402)
- DEA LD 50 (Rabbit): 12,970 mg/kg

Inhalation

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
- Dilithium azelate No data available.

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Skin Corrosion/Irritation:

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

Specified substance(s)

Dilithium azelate OECD 431 Based on available data, the classification criteria are not met.
OECD 439 Based on available data, the classification criteria are not met.

ZnDTP (Rabbit): None.

Serious Eye Damage/Eye Irritation:

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

Specified substance(s)

Dilithium azelate OECD 405 (Rabbit): Based on available data, the classification criteria are not met.

ZnDTP (Rabbit): Slightly irritating.

Respiratory or Skin Sensitization:

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

Specified substance(s)

Dilithium azelate , OECD 429 (Mouse)Based on available data, the classification criteria are not met.

ZnDTP , OECD 406-1 (Guinea Pig)Not a skin sensitizer.

phenolic antioxidant No sensitizing effect (guinea pig); OECD 406

DEA No sensitizing effect (guinea pig); OECD 406

Germ Cell Mutagenicity

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

In vitro

Specified substance(s)

Dilithium azelate (OECD 471)
Based on available data, the classification criteria are not met.

Carcinogenicity

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

IARC: IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

NTP: US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

OSHAS: US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Reproductive toxicity

Product name: RENOLIT LX-OTP 2

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.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity

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

Fish

Specified substance(s)

Dilithium azelate LC 50 (Fish, 96 h): 100 mg/l (OECD 203)

ZnDTP LC 50 (Fish, 96 h): 4.4 mg/l (OECD 203)

Zn-Octoate LC 50 (Fish, 96 h): 100 mg/l (OECD 203)

DEA LC 50 (Fish, 96 h): 1,460 mg/l

Aquatic Invertebrates

Specified substance(s)

Dilithium azelate EC 50 (Water Flea, 48 h): 100 mg/l (OECD 202)

ZnDTP EC 50 (Water Flea, 48 h): 75 mg/l (OECD 202)

DEA EC 50 (Water Flea, 48 h): 55 mg/l

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

Fish

Specified substance(s)

ZnDTP NOEC (Fish, 4 d): 3.2 mg/l

Aquatic Invertebrates

Specified substance(s)

ZnDTP NOEC (Water Flea, 21 d): 0.4 mg/l

phenolic antioxidant NOEC (Water Flea, 21 d): > 0.39 mg/l

DEA NOEC (Water Flea, 21 d): 0.78 mg/l

Toxicity to Aquatic Plants

Specified substance(s)

Dilithium azelate EC 50 (Alga, 72 h): 100 mg/l (OECD 201)

Product name: RENOLIT LX-OTP 2

ZnDTP EC 50 (Alga, 72 h): 410 mg/l

12.2 Persistence and Degradability

Biodegradation

Product:	Not applicable for mixtures
Specified substance(s)	
Dilithium azelate	(OECD 301D) Inherently biodegradable
ZnDTP	5 % (28 d, OECD 301B)
carboxylic acid zinc salt	29 % (28 d, OECD 301B) Not easily biodegradable
Zn-Octoate	70 % (28 d, OECD 301D) Readily biodegradable
phenolic antioxidant	30 % (OECD 302C)
DEA	93 % (28 d, OECD 301F) Readily biodegradable

12.3 Bioaccumulative potential

Product:	Not applicable for mixtures
Specified substance(s)	
phenolic antioxidant	May be accumulated in organism

12.4 Mobility in soil:

Product:	Not applicable for mixtures
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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:

Harmful to aquatic life with long lasting effects.

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.

14 TRANSPORT INFORMATION

DOT

Not regulated.

IMDG - International Maritime Dangerous Goods Code

Not regulated.

IATA

Not regulated.

Product name: RENOLIT LX-OTP 2

15 REGULATORY INFORMATION

US Federal Regulations

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Inventory Status

DSL	On or in compliance with the inventory
TSCA	On or in compliance with the inventory

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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
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.

Revision Date: 16.09.2019

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.