



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: RENOLIT RHF 1

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 / Supplier

Fuchs Schmierstoffe GmbH
Friesenheimer Str. 19
68169 Mannheim

Telephone:

+49 621 3701-0 (ZENTRALE)

Fax:

+49 621 3701-570

Contact Person:

Fuchs Schmierstoffe GmbH Abteilung Produktsicherheit

Telephone:

+49 621 3701-1333

Fax:

+49 621 3701-7303

E-mail:

produktsicherheit@fuchs-schmierstoffe.de

1.4 Emergency telephone number:

+49 621 3701-1333 ODER +49 621 3701-0

**EMERGENCY
TELEPHONE NO.
800-255-3924**

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.

Health Hazards

Skin irritation

Category 2

H315: Causes skin irritation.

Serious eye irritation

Category 2

H319: Causes serious eye irritation.

Environmental Hazards

Chronic hazards to the aquatic environment

Category 2

H411: Toxic to aquatic life with long lasting effects.

Hazard summary

Physical Hazards:

No data available.

Product name: RENOLIT RHF 1

2.2 Label Elements



Signal Words: Warning

Hazard Statement(s): H315: Causes skin irritation.
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement

Prevention: P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release to the environment.

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

Chemical name	Concentration *	Identifier	REACH Registration No.	Notes
Heterocyclic N-compound	1,00 - <2,50%	202-414-9	01-2119777867-13	
ZnDTP	0,00 - <1,00%	224-235-5	01-2119493635-27	
phenolic antioxidant	0,25 - <1,00%	204-681-4	01-2119565113-46	

* 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: RENOLIT RHF 1

Classification

Chemical name	Classification
Heterocyclic N-compound	CLP: Skin Corr. 1B;H314, STOT RE 2;H373, Aquatic Acute 1;H400, Aquatic Chronic 1;H410, Acute Tox. 4;H302
ZnDTP	CLP: Eye Dam. 1;H318, Aquatic Chronic 2;H411
phenolic antioxidant	CLP: Aquatic Acute 1;H400, Aquatic Chronic 1;H410

CLP: Regulation No. 1272/2008.

For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

General: Change clothes and shoes contaminated or soaked by the product. Never put rags contaminated by the product into clothing pockets.

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: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

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

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: 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

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.

Product name: RENOLIT RHF 1

5.3 Advice for firefighters

Special fire fighting procedures: No data available.

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. Do not contaminate water sources or sewer.

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.

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. Avoid contact with skin.

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

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

8.2 Exposure controls

Product name: RENOLIT RHF 1

Appropriate engineering controls: No data available.

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 eyes.

Skin protection
Hand Protection: Nitrile butyl rubber (NBR). 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.

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
Odor Threshold:	No data available.
pH:	not applicable
Melting Point:	No data available.
Boiling Point:	not applicable
Flash Point:	not applicable
Evaporation Rate:	No data available.



Product name: RENOLIT RHF 1

Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Density:	0,90 g/ml (25,00 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
NLGI:	1
Explosive properties:	No data available.
Oxidizing properties:	No data available.
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:	Avoid heat or contamination.
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:	Causes skin irritation.
Eye contact:	Causes eye irritation.

Product name: RENOLIT RHF 1

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	ATEmix: 71.468,93 mg/kg
Specified substance(s)	
Heterocyclic N-compound	LD 50 (Rat): 1.265 mg/kg
ZnDTP	LD 50 (Rat): 4.358 mg/kg
phenolic antioxidant	LD 50 (Rat): 2.930 mg/kg

Dermal

Product:	Not classified for acute toxicity based on available data.
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Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	LD 50 (Rat): > 5.000 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
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Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

Repeated dose toxicity

Product:	No data available.
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Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	(Rat, Oral, 28 d): 25 mg/kg

Skin Corrosion/Irritation:

Product:	No data available.
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Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	(Rabbit): None.
phenolic antioxidant	(Rabbit): Slightly irritating.

Product name: RENOLIT RHF 1

Serious Eye Damage/Eye Irritation:

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	(Rabbit): Slightly irritating.
phenolic antioxidant	(Rabbit): Slightly irritating.

Respiratory or Skin Sensitization:

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No sensitizing effect (guinea pig); OECD 406

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

In vivo

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

Carcinogenicity

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

Product name: RENOLIT RHF 1

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

Other Adverse Effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	LC 50 (Fish, 96 h): 0,3 mg/l
ZnDTP	LC 50 (Fish, 96 h): 1,1 - 10 mg/l
phenolic antioxidant	LC 50 (Fish, 96 h): > 0,57 mg/l (OECD 203)

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Heterocyclic N-compound	EC 50 (Water Flea, 48 h): 0,136 mg/l LC 50 (Water Flea, 24 h): 0,37 mg/l
ZnDTP	EC 50 (Water Flea, 48 h): 1,1 - 10 mg/l
phenolic antioxidant	EC 50 (Water Flea, 48 h): > 0,17 mg/l

Chronic Toxicity

Fish

Product name: RENOLIT RHF 1

Product: No data available.

Specified substance(s)

Heterocyclic N-compound No data available.
ZnDTP No data available.
phenolic antioxidant No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Heterocyclic N-compound No data available.
ZnDTP No data available.
phenolic antioxidant NOEC (Water Flea, 21 d): > 0,39 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

Heterocyclic N-compound EC 50 (Alga, 72 h): 0,03 mg/l
ZnDTP EC 50 (Alga, 72 h): > 240 mg/l
phenolic antioxidant EC 50 (Alga, 72 h): > 0,42 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

Heterocyclic N-compound No data available.
ZnDTP No data available.
phenolic antioxidant 30 %

12.3 Bioaccumulative Potential

Product: No data available.

Specified substance(s)

Heterocyclic N-compound No data available.
ZnDTP No data available.
phenolic antioxidant May be accumulated in organism

12.4 Mobility in Soil:

No data available.

Known or predicted distribution to environmental compartments

Heterocyclic N-compound No data available.
ZnDTP No data available.
phenolic antioxidant No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

Product name: RENOLIT RHF 1

Heterocyclic N-compound	No data available.
ZnDTP	No data available.
phenolic antioxidant	No data available.

12.6 Other Adverse Effects: Toxic to aquatic life with long lasting effects.

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:	UN 3077
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Imidazoline derivative)
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
Hazard No. (ADR):	90
Tunnel restriction code:	(E)
14.4 Packing Group:	III
14.5 Environmental hazards:	Dangerous for the environment
14.6 Special precautions for user:	—

ADN

14.1 UN Number:	UN 3077
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Imidazoline derivative)
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
14.3 Packing Group:	III
14.5 Environmental hazards:	Dangerous for the environment
14.6 Special precautions for user:	—

Product name: RENOLIT RHF 1

IMDG

14.1 UN Number:	UN 3077
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Imidazoline derivative)
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
14.3 Packing Group:	III
14.5 Environmental hazards:	Marine pollutant
14.6 Special precautions for user:	—

IATA

14.1 UN Number:	UN 3077
14.2 Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s.(Imidazoline derivative)
14.3 Transport Hazard Class(es):	
Class:	9
Label(s):	9MI
14.4 Packing Group:	III
14.5 Environmental hazards:	Dangerous for the environment
14.6 Special precautions for user:	—

Amounts up to 5kg or 5 L are not regulated, (ADR/RID SV 375, IMDG 2.10.2.7, IATA SP A197)

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable.

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Revision Information:

Vertical lines in the margin indicate an amendment.