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 H 442

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

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 Directive 67/548/EEC or 1999/45/EC as amended.

R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

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

Precautionary Statement

Prevention: 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 solvent refined mineral oil.

Chemical name	Concentration *	Identifier	REACH Registration No.	Notes
phenolic antioxidant	0,25 - <1,00%	204-881-4	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.

Classification

Chemical name	Classification	
phenolic antioxidant	DSD:	N; R50/53
	CLP:	Aquatic Acute 1;H400, Aquatic Chronic 1;H410

DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008.

The full text for all R-phrases and H-statements is displayed in 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:	Promptly wash eyes with plenty of water while lifting the eye lids.
Skin Contact:	Wash with soap and water. The product is not skin irritating.
Ingestion:	Rinse mouth thoroughly.
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

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.

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:	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. Stop the flow of material, if this is without risk. 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.

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

None of the components have assigned exposure limits.

8.2 Exposure controls

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. 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 inhandling the chemicals or the mineral oil products.

Eye/face protection: Safety glasses (EN 166) recommended during refilling.

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 trough 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:	185 °C
Boiling Point:	No data available.
Flash Point:	200 °C
Evaporation Rate:	No data available.
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 °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:	2
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

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

phenolic antioxidant	LD 50 (Rat): 2.930 mg/kg

Dermal

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

phenolic antioxidant	LD 50 (Rat): > 5.000 mg/kg

Inhalation

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

phenolic antioxidant	No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s)

phenolic antioxidant (Rat, Oral, 28 d): 25 mg/kg

Skin Corrosion/Irritation:

Product: No data available.

Specified substance(s)

phenolic antioxidant (Rabbit):
Slightly irritating.

Serious Eye Damage/Eye Irritation:

Product: No data available.

Specified substance(s)

phenolic antioxidant (Rabbit):
Slightly irritating.

Respiratory or Skin Sensitization:

Product: No data available.

Specified substance(s)

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

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

phenolic antioxidant No data available.

In vivo

Product: No data available.

Specified substance(s)

phenolic antioxidant No data available.

Carcinogenicity

Product: No data available.

Specified substance(s)

phenolic antioxidant No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

phenolic antioxidant No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

phenolic antioxidant No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Specified substance(s)

phenolic antioxidant No data available.

Aspiration Hazard

Product: No data available.

Specified substance(s)

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)

phenolic antioxidant LC 50 (Fish, 96 h): > 0,57 mg/l (OECD 203)

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

phenolic antioxidant EC 50 (Water Flea, 48 h): > 0,17 mg/l

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

phenolic antioxidant No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

phenolic antioxidant NOEC (Water Flea, 21 d): > 0,39 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

phenolic antioxidant EC 50 (Alga, 72 h): > 0,42 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

phenolic antioxidant 30 %

12.3 Bioaccumulative Potential

Product: No data available.

Specified substance(s)

phenolic antioxidant May be accumulated in organism

12.4 Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

phenolic antioxidant No data available.

12.5 Results of PBT and vPvB assessment: No data available.

phenolic antioxidant No data available.

12.6 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:	–
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:	–

ADN

14.1 UN Number:	–
14.2 UN Proper Shipping Name:	–
14.3 Transport Hazard Class(es)	
Class:	Non-dangerous goods
Label(s):	–
14.3 Packing Group:	–
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

IMDG

14.1 UN 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:	–
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 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

National Regulations

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

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.

Wording of the R-phrases and H-statements in section 2 and 3

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Training information: Follow training instructions when handling this material.

Other information: The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).

Revision Date: 06.05.2015

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.