

SAFETY DATA SHEET

acc.to ISO/DIS 11014 for USA

PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier Product name: RENOLIT BNG 1

1

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 / Supplier	FUCHS LUBRICANTS GERMANY GmbH
	Friesenheimer Str. 19
	68169 Mannheim

Telephone:	+49 621 3701-0 (ZENTRALE)
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Contact for request of safety data sheets

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Telephone:	+49 621 3701-0 (ZENTRALE)	

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E-mail:	produktsicherheit-FLG@fuchs.com
1.4 US contact telephone :	708-333-8900
Emergency telephone:	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		
Serious Eye Damage/Eye	Irritation	Category 2A
Toxic to reproduction		Category 2
Hazard summary Physical Hazards:	No data available	.





Product name: RENOLIT BNG 1

2.2 Label Elements

(!	
Signal Words:	Warning
Hazard Statement(s):	H319: Causes serious eye irritation. H361: Suspected of damaging fertility or the unborn child.
Precautionary Stateme	nts
Prevention:	 P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P264: Wash thoroughly after handling. P273: Avoid release to the environment. P281: Use personal protective equipment as required. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P337+P313: If eye irritation persists: Get medical advice/attention. P308+P313: IF exposed or concerned: Get medical advice/attention.
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.
.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.
COMPOSITION / INFORMA	TION ON INGREDIENTS

3.2 Mixtures

2.3

3

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

Chemical name	Identifier	Concentration *	Notes
Phosphoric acid ester, amine salt	942-466-6	1.00 - <3.00%	
Mo dithiocarbamate	441-570-4	1.00 - <5.00%	
Triaryl phosphate, alkylated	68937-40-6	1.00 - <2.50%	





Product name: RENOLIT BNG 1

ZnDTP	4259-15-8	1.00 - <2.50%	
Amine aromatic , alkylated	68411-46-1	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
Phosphoric acid ester, amine salt	942-466-6	Eye Dam. 1;H318
Mo dithiocarbamate	441-570-4	, Skin Irrit. 2;H315
Triaryl phosphate, alkylated	68937-40-6	Aquatic Acute 1;H400, Aquatic Chronic 2;H411; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 1
ZnDTP	4259-15-8	Eye Dam. 1;H318, Aquatic Chronic 2;H411
Amine aromatic , alkylated	68411-46-1	Repr. 2;H361f, 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:	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
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 BNG 1

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 inaccordance 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 m	easures
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. 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. 7.2 Conditions for safe storage, including any incompatibilities: 7.3 Specific end use(s): Not applicable

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1.Exposure Limits

None of the components have assigned exposure limits.

8.2. Exposure controls



Product name: RENOLIT BNG 1

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 measu	res, 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. 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: >= 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.
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.
PHYSICAL AND CHEMICAL PROPERTIES	

9.1 Information on basic physical and chemical properties Appearance		
Physical state:	solid	
Form:	Paste	
Color:	Green, Brown	
Odor:	Characteristic	
Odor Threshold:	Not applicable for mixtures	
pH:	substance/mixture is non-soluble (in water)	



Product name: RENOLIT BNG 1

Drop Point:	180 °C (IP 396)
Boiling Point:	Value not relevant for classification
Flash Point:	Not applicable
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
Relative vapor density:	Not applicable for mixtures
Density:	0.86 g/cm3 (25 °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:	0-1
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.
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 route Inhalation:	es of exposure No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	Causes eye irritation.



Product name: RENOLIT BNG 1

Acute toxicity	
Oral Product:	
Creating automatic	Not classified for acute toxicity based on available data.
Specified substance(s) Triaryl phosphate, alkylated	LD 50 (Rat): > 5,001 mg/kg
ZnDTP	LD 50 (Rat): 4,358 mg/kg
Amine aromatic , alkylated	LD 50 (Rat): > 5,000 mg/kg (OECD 401)
Dermal Product:	
Specified substance(s)	Not classified for acute toxicity based on available data.
ZnDTP	LD 50 (Rabbit): > 5,000 mg/kg (OECD 402)
Inhalation Product:	
Specified substance(s)	Not classified for acute toxicity based on available data.
Triaryl phosphate, alkylated	Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation: Product:	Based on available data, the classification criteria are not met.
Specified substance(s) ZnDTP	(Rabbit): None.
Serious Eye Damage/Eye Irri Product:	itation: Based on available data, the classification criteria are met.
Specified substance(s) ZnDTP	(Rabbit): Slightly irritating.
Amine aromatic , alkylated	OECD 405 (Rabbit): Not irritant.



Product name: RENOLIT BNG 1

	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)		
	ZnDTP	, OECD 406-1 (Guinea Pig)Not a skin sensitizer.	
	Amine aromatic , alkylated	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.	
	IARC: IARC Monographs o	on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified	
	NTP: US. National Toxicol	ogy Program (NTP) Report on Carcinogens:	
		No carcinogenic components identified	
	OSHASP: US. OSHA Spec	ifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified	
	Reproductive toxicity		
	Product:	Based on available data, the classification criteria are met.	
	Specific Target Organ Toxic	ity Single Experies	
	Product:	Based on available data, the classification criteria are not met.	
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	Specific Target Organ Toxic 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 INFORMATIO	N	
12.1	Toxicity		
	-		
	A outo toxicity		

Acute toxicity	
Product:	

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

Fish Specified substance(s) Phosphoric acid ester, amine salt

LC 50 (Fish, 94 h): 75 mg/l



Product name: RENOLIT BNG 1

Mo dithiocarbamate	LC 50 (Fish, 96 h): 400 mg/l
Triaryl phosphate, alkylated	LC 50 (Fish, 96 h): 0.8 mg/l
ZnDTP	LC 50 (Fish, 96 h): 4.4 mg/l (OECD 203)
Amine aromatic , alkylated	LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)
Aquatic Invertebrates Specified substance(s) Phosphoric acid ester, amine salt	EC 50 (Water Flea, 48 h): 10 mg/l
Mo dithiocarbamate	EC 50 (Water Flea, 48 h): 15 mg/l
Triaryl phosphate, alkylated	EC 50 (Water Flea, 48 h): 0.202 mg/l
ZnDTP	EC 50 (Water Flea, 48 h): 75 mg/l (OECD 202)
Amine aromatic , alkylated	EC 50 (Daphnia magna): 51 mg/l (OECD 202)
Chronic ToxicityProduct:	Based on available data, the classification criteria are not met.
Fish Specified substance(s) Triaryl phosphate, alkylated	NOEC (Fish, 90 d): 0.093 mg/l
ZnDTP	NOEC (Fish, 4 d): 3.2 mg/l
Aquatic Invertebrates Specified substance(s) Phosphoric acid ester, amine salt	NOEC (Water Flea, 21 d): 1.6 mg/l
Triaryl phosphate, alkylated	NOEC (Water Flea, 21 d): 0.0399 mg/l
ZnDTP	NOEC (Water Flea, 21 d): 0.4 mg/l
Toxicity to Aquatic Plants Specified substance(s) Phosphoric acid ester, amine salt	EC 50 (Alga, 72 h): 32 mg/l NOEC (Alga, 72 h): 5 mg/l
Mo dithiocarbamate	EC 50 (Alga, 72 h): 3.4 mg/l
Triaryl phosphate, alkylated	EC 50 (Alga, 72 h): 1.4 mg/l NOEC (Alga, 72 h): 0.05 mg/l



Product name: RENOLIT BNG 1

	ZnDTP	EC 50 (Alga, 72 h): 410 mg/l NOEC (Alga, 72 h): 220 mg/l
	Amine aromatic , alkylated	EC 50 (72 h): > 100 mg/l (OECD 201)
12.2	Persistence and Degradabil	ity
Biodegradation Product: Specified substance(s) Triaryl phosphate, alkylated	Not applicable for mixtures	
	Triaryl phosphate,	61 % (28 d) Readily biodegradable
	ZnDTP	5 % (28 d, OECD 301B) Not readily degradable.
	Amine aromatic , alkylated	Not readily degradable.
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:	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.

ΙΑΤΑ

Not regulated.

15 REGULATORY INFORMATION



Product name: RENOLIT BNG 1

US Federal Regulations

US State Regulations

Inventory Status

TSCA	On or in compliance with the inventory
DSL	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

H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Revision Date:	23.01.2023
Disclaimer:	The data contained in this safety data sheet knowledge and experience and are given to belief. It characterizes the product only with

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.