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 IPR 2

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	US Distributor Fuchs Lubricants Co. 17050 Lathrop Avenue Harvey, IL 60426 (708) 333-8900 (800) 255-3924 24 hrs Emergency
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 / +49 621 3701-0 (Mo-Do 8-17, Fr 8-16)

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 3	H412: Harmful to aquatic life with long lasting effects.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Signal Words: Warning

Hazard Statement(s):
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

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	Identifier	Concentration *	REACH Registration No.	Notes
Heterocyclic N-compound	EINECS: 202-414-9	1,00 - <2,50%	01-2119777867-13	
ZnDTP	EINECS: 224-235-5	1,00 - <2,50%	01-2119493635-27	
phenolic antioxidant	EINECS: 204-881-4	0,10 - <0,25%	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	Identifier	Classification	
Heterocyclic N-compound	EINECS: 202-414-9	CLP:	Skin Corr. 1C;H314, STOT RE 2;H373, Aquatic Acute 1;H400, Aquatic Chronic 1;H410, Acute Tox. 4;H302; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 1
ZnDTP	EINECS: 224-235-5	CLP:	Eye Dam. 1;H318, Aquatic Chronic 2;H411
phenolic antioxidant	EINECS: 204-881-4	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: 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: 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: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

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 Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

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 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 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. 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
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:	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 inhandling 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:	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:	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:	Yellow
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	not applicable
Melting Point:	Not applicable for mixtures
Boiling Point:	not applicable
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
Vapor density (air=1):	Not applicable for mixtures
Density:	0,95 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:	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.
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.

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.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	ATEmix: 60.238 mg/kg
Specified substance(s)	
Heterocyclic N-compound	LD 50 (Rat): 1.265 mg/kg (OECD 401)
ZnDTP	LD 50 (Rat): 4.358 mg/kg
phenolic antioxidant	LD 50 (Rat): 2.930 mg/kg (OECD 401)

Dermal

Product:	
	Not classified for acute toxicity based on available data.
Specified substance(s)	
phenolic antioxidant	LD 50 (Rat): > 5.000 mg/kg (OECD 402)

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

Skin Corrosion/Irritation:
Product: Based on available data, the classification criteria are met.
Specified substance(s)
Heterocyclic N-compound — OECD 404 (Rabbit):
Corrosive.

ZnDTP — (Rabbit):
None.

Serious Eye Damage/Eye Irritation:
Product: Based on available data, the classification criteria are met.
Specified substance(s)
Heterocyclic N-compound — OECD 405 (Rabbit):
Corrosive.

ZnDTP — (Rabbit):
Slightly irritating.

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)
phenolic antioxidant
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.

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.

Other adverse effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

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

Fish
Specified substance(s)

Heterocyclic N-compound	LC 50 (Fish, 96 h): 0,3 mg/l (OECD 203)
ZnDTP	LC 50 (Fish, 96 h): 4,4 mg/l
phenolic antioxidant	LC 50 (Fish, 96 h): > 0,57 mg/l (OECD 203)

Aquatic Invertebrates
Specified substance(s)

Heterocyclic N-compound	EC 50 (Water Flea, 48 h): 0,136 mg/l (OECD 202)
ZnDTP	EC 50 (Water Flea, 48 h): 75 mg/l
phenolic antioxidant	EC 50 (Water Flea, 48 h): > 0,17 mg/l

Chronic ToxicityProduct:	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

Toxicity to Aquatic Plants
Specified substance(s)

Heterocyclic N-compound	EC 50 (Alga, 72 h): 0,03 mg/l (OECD 201) NOEC (Alga, 72 h): 0,11 mg/l
ZnDTP	EC 50 (Alga, 72 h): 410 mg/l
phenolic antioxidant	EC 50 (Alga, 72 h): > 0,42 mg/l

12.2 Persistence and Degradability

Biodegradation

Product:	Not applicable for mixtures

Specified substance(s)

Heterocyclic N-compound	(OECD 301B) The product is not biodegradable.
ZnDTP	5 % (28 d, OECD 301B)
phenolic antioxidant	30 % (OECD 302C)

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

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.

Water Hazard Class (WGK): WGK 2: 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 MARPOL 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 2: 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 H-statements in section 2 and 3

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.

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: 18.11.2016

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.