MOVING YOUR WORLD



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: **RENOLIN B 46 HVI PLUS**

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

Identified uses:	Lubricant

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier Telephone:	FUCHS LUBRICANTS NORWAY AS Fredrik Selmersvei 6 0663 Oslo Norway +47 21 99 59 50	
Contact Person: E-mail: Telephone:	HSE Advisor fse-hseasc@fuchs.com +46 8 128 25 000	
.4 Emergency telephone number:	+47 22 59 13 00	

1.4 Emergency telephone number:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has not been classified as hazardous and does not need to be labelled according to regulation (EU) no 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Hazard summary Physical Hazards:	No data available.
2.2 Label Elements	Not applicable
2.3 Information on other haz- ards	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.
Endocrine disrupting prop- erties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Com- mission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients





3.2 Mixtures

General information: Mixture containing severely refined base oils and additives. The components are not hazardous or are below required disclosure limits.

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Nota L/ Nota N of Annex VI of Regulation EC 1272/2008."

SECTION 4: First aid measures

General:	Instantly remove any clothing soiled by the product.
4.1 Description of first aid measured inhalation:	ures 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.
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 spe- cial treatment needed	Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing me- dia:	CO2, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant add-ed
Unsuitable extinguishing media:	Water with a full water jet.
5.2 Special hazards arising from the substance or mix- ture:	During fire, gases hazardous to health may be formed.
5.3 Advice for firefighters	
Special fire-fighting proce- dures:	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 equip- ment 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, pro- tective equipment and emergency procedures:	In case of spills, beware of slippery floors and surfaces.
6.2 Environmental Precautions:	Prevent from spreading (e.g. by binding or oil barriers). Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water.
6.3 Methods and material for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.
6.4 Reference to other sec- tions:	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	e:
7.1 Precautions for safe han- dling:	Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil prod- ucts or chemical products. Observe good industrial hygiene practices. Pro- vide adequate ventilation.
7.2 Conditions for safe storage, including any incompatibili- ties:	Local regulations concerning handling and storage of waterpolluting prod- ucts have to be followed. Do not heat up to temperatures close to the flash point.
7.3 Specific end use(s):	No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Туре	Exposure Limit Values	Source
Unalloyed mineral oil - Mist.	NORMEN	1 mg/m3	Norway. Regulation No. 1358 on Measures and Limit Values for Physical and Chemical Factors in Work Environment and Infection Groups for Biological Factors, as amended (12 2011)

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 equip- ment as required. Personal protection equipment should be chosen accord- ing to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be ad- hered to inhandling the chemicals or the mineral oil products.
Eye/face protection:	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 recom- mended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety direc- tions. The exact break through time has to be found out by the manufactur- er 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:	Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.
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 foot- wear 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:	liquid
Form:	liquid
Color:	Yellow
Odor:	Characteristic
pH:	substance/mixture is non-soluble (in water)
Freezing point:	not determined
Boiling Point:	not determined
Flash Point:	240 °C
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	not determined
Explosion Limit - Upper (%):	Not applicable for mixtures
Explosion Limit - Lower (%):	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures





Relative vapor density:	Not applicable for mixtures
Density:	0,85 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
Auto-ignition temperature:	not determined
Decomposition Temperature:	not determined
Kinematic viscosity:	46 mm2/s (40 °C)
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
Particle characteristics:	Not applicable
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 oth- er toxic gases or vapors.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	
Oral Product:	Not classified for acute toxicity based on available data.
Dermal Product:	Not classified for acute toxicity based on available data.
Inhalation Product:	Not classified for acute toxicity based on available data.
Skin Corrosion/Irritation: Product:	Based on available data, the classification criteria are not met.





Product name: RENOLIN B 46 HVI PLUS		
Serious Eye Damage/Eye Irritation: Product: Based on available data, the classification criteria are not met.		
Respiratory or Skin Sensitiza Product:	ation: Skin sensitizer: Based on available data, the classification criteria are not met. Respiratory sensitizer: Based on available data, the classification criteria are not met.	
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 Toxici Product:	ty - Single Exposure Based on available data, the classification criteria are not met.	
Specific Target Organ Toxici Product:	ty - Repeated Exposure Based on available data, the classification criteria are not met.	
Aspiration Hazard Product:	Based on available data, the classification criteria are not met.	
11.2 Information on other haz- ards		
Endocrine disrupting properti Product:	es The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Com- mission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	
SECTION 12: Ecological information		
12.1 Toxicity		
Acute toxicity Product:	Based on available data, the classification criteria are not met.	
Chronic ToxicityProduct:	Based on available data, the classification criteria are not met.	
12.2 Persistence and Degradability		
Biodegradation Product:	Not applicable for mixtures	
12.3 Bioaccumulative potential Product:	Not applicable for mixtures	

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 Endocrine disrupting properties		
Product:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Com- mission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	
12.7 Other adverse effects:	No data available.	
SECTION 13: Disposal considerat	ions	
13.1 Waste treatment methods		
General information:	Dispose in accordance with all applicable regulations.	
Disposal methods:	Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are observed.	
European Waste Codes		
	13 01 10*: mineral based non-chlorinated hydraulic oils	
SECTION 14: Transport information		

ADR/RID

14.1 UN number or ID 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:	_





IMDG 14.1 UN number or ID number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es) Class: Label(s): EmS No.:	– – Non-dangerous goods – –
14.3 Packing Group: 14.5 Environmental hazards: 14.6 Special precautions for user:	- - -
IATA 14.1 UN number or ID number: 14.2 Proper Shipping Name: 14.3 Transport Hazard Class(es): Class: Label(s): 14.4 Packing Group: 14.5 Environmental hazards: 14.6 Special precautions for user:	– – Non-dangerous goods – – –

14.7 Maritime transport in bulk according to IMO instruments: Not applicable.

SECTION 15: Regulatory information

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

EU Regulations

EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

DIRECTIVE 2012/18/EU (SEVESO III) on the control of major-accident hazards involving dangerous substances

Not applicable

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

none

Other information:

The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided

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Product name: RENOLIN B 46 HVI PLUS

	by/about our company. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially simi- lar mixtures" - Expert Judgement
Revision Date: Disclaimer:	07.12.2023 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 de- duced 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 pro- cessing, 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

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