

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 UNISYN CLP 46 NFR

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

Identified uses: Lubricant

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier FUCHS LUBRICANTS NORWAY AS
Innspurten 13 A
0663 Oslo
Norway
Telephone: +47 21 99 59 50

Contact Person: HSE Advisor
E-mail: fse-hseasc@fuchs.com
Telephone: +46 8 128 25 000

1.4 Emergency telephone number: +47 22 59 13 00

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.

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.

2.2 Label Elements



Hazard Statement(s): H411: Toxic to aquatic life with long lasting effects.

Product name: RENOLIN UNISYN CLP 46 NFR

Precautionary Statements

Prevention: P273: Avoid release to the environment.

Disposal: P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

2.3 Information on 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.

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Results of PBT and vPvB assessment:

Contains:
Aryl thiophosphate (TPPT) Fulfilling PBT (persistent/bioaccumulative/toxic) criteria

SECTION 3: Composition/information on ingredients
3.2 Mixtures

General information: Mixture of synthetic base oils with additives.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
Amine aromatic , alkylated	EINECS: 270-128-1	0,10% - <1,00%	01-2119491299-23	
phenolic antioxidant	EINECS: 204-881-4	0,25% - <1,00%	01-2119565113-46	
Aryl thiophosphate (TPPT)	EINECS: 209-909-9	0,25% - <1,00%	01-2119979545-21	PBT **
Oleic acid derivative	EINECS: 701-177-3	0,10% - <1,00%	01-2119488991-20	

* 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.

** Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Classification

Chemical name	Identifier	Classification
Amine aromatic , alkylated	EINECS: 270-128-1	CLP: Repr. 2;H361f, Aquatic Chronic 3;H412
phenolic antioxidant	EINECS: 204-881-4	CLP: Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 1
Aryl thiophosphate (TPPT)	EINECS: 209-909-9	CLP: , Aquatic Chronic 1;H410; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 10
Oleic acid derivative	EINECS: 701-177-3	CLP: Eye Dam. 1;H318, Aquatic Acute 1;H400, Skin Irrit. 2;H315, Aquatic Chronic 3;H412, Acute Tox. 4;H332

CLP: Regulation No. 1272/2008.

Product name: RENOLIN UNISYN CLP 46 NFR

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: 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 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.

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 in accordance 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: In case of spills, beware of slippery floors and surfaces.

6.2 Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. Do not allow to enter drainage system, surface or ground water.

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- 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 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:** Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Observe good industrial hygiene practices. Provide adequate ventilation.
- 7.2 Conditions for safe storage, including any incompatibilities:** Local regulations concerning handling and storage of waterpolluting products have to be followed. Do not heat up to temperatures close to the flash point.
- 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

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 in handling 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.

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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:

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 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:	liquid
Form:	liquid
Color:	Colorless
Odor:	Characteristic
pH:	substance/mixture is non-soluble (in water) substance/mixture is non-soluble (in water)
Freezing point:	< -50 °C
Boiling Point:	> 200 °C
Flash Point:	252 °C ()
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:	0,84 g/cm ³ (15 °C) (DIN EN ISO 12185)
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:	> 200 °C

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Decomposition Temperature:	not determined
Kinematic viscosity:	46 mm ² /s (40 °C, DIN EN ISO 3104)
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 other 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.

Specified substance(s)

Amine aromatic , alkylated	LD 50 (Rat): > 5.000 mg/kg (OECD 401)
phenolic antioxidant	LD 50 (Rat): > 2.930 mg/kg (OECD 401)
Aryl thiophosphate (TPPT)	LD 50 (Rat): > 10.000 mg/kg
Oleic acid derivative	LD 50 (Rat): > 5.000 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 (OECD 402)
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Inhalation

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

Specified substance(s)

Oleic acid derivative	LC 50 (Rat, 4 h): 1,37 mg/l
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Skin Corrosion/Irritation:

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

Serious Eye Damage/Eye Irritation:

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

Specified substance(s)

Amine aromatic , alkylated
OECD 405 (Rabbit):
Not irritant.

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)

Amine aromatic , alkylated
No sensitizing effect (guinea pig); OECD 406

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.

Specified substance(s)

Amine aromatic , alkylated
oral (Rat, OECD 421), Suspected of damaging fertility.

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.

11.2 Information on other hazards

Endocrine disrupting properties

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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SECTION 12: Ecological information

Acute toxicity

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

Fish

Specified substance(s)

Amine aromatic , alkylated LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)

Aryl thiophosphate (TPPT) LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)

Oleic acid derivative LC 50 (Fish, 96 h): 6,8 mg/l

Aquatic Invertebrates

Specified substance(s)

Amine aromatic , alkylated EC 50 (Daphnia magna): 51 mg/l (OECD 202)

phenolic antioxidant EC 50 (Water Flea, 48 h): 0,61 mg/l (OECD 202)

Aryl thiophosphate (TPPT) EC 50 (Water Flea, 48 h): > 100 mg/l

Oleic acid derivative EC 50 (Water Flea, 48 h): 0,43 mg/l

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Fish

Specified substance(s)

Aryl thiophosphate (TPPT) NOEC (Fish, 97 d): 0,0017 mg/l (OECD 210)

Aquatic Invertebrates

Specified substance(s)

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

Aryl thiophosphate (TPPT) NOEC (Water Flea, 21 d): 0,00724 mg/l (OECD 211)

Oleic acid derivative NOEC (Water Flea, 21 d): > 0,183 mg/l

Toxicity to Aquatic Plants

Specified substance(s)

Amine aromatic , alkylated EC 50 (72 h): > 100 mg/l (OECD 201)

Aryl thiophosphate (TPPT) EC 10 (Alga, 72 h): > 100 mg/l (OECD 201)
EC 50 (Alga, 72 h): > 100 mg/l (OECD 201)

Oleic acid derivative EC 50 (Alga, 72 h): 6,3 mg/l
NOEC (Alga, 72 h): 0,91 mg/l

12.2 Persistence and Degradability

Product name: RENOLIN UNISYN CLP 46 NFR

Biodegradation

Product:	Not applicable for mixtures
Specified substance(s)	
Amine aromatic , alkylated	Not readily degradable.
phenolic antioxidant	30 % (OECD 302C) Not readily degradable.
Aryl thiophosphate (TPPT)	Not easily biodegradable
Oleic acid derivative	85,2 % (28 d, OECD 301B) Readily biodegradable

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
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12.5 Results of PBT and vPvB assessment:

Aryl thiophosphate (TPPT)	Fulfilling PBT (persistent/bioaccumulative/toxic) criteria
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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 Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
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12.7 Other adverse effects:

Toxic to aquatic life with long lasting effects. Harmful 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

13 02 06*: synthetic engine, gear and lubricating oils

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SECTION 14: Transport information

ADR/RID

14.1 UN number or ID number: UN 3082
 14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Aryl thiophosphate (TPPT), phenolic antioxidant)
 14.3 Transport Hazard Class(es)
 Class: 9
 Label(s): 9
 Hazard No. (ADR): 90
 Tunnel restriction code: (-)
 14.4 Packing Group: III
 14.5 Environmental hazards: Dangerous for the environment
 14.6 Special precautions for user: -

IMDG

14.1 UN number or ID number: UN 3082
 14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Aryl thiophosphate (TPPT), phenolic antioxidant)
 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 or ID number: UN 3082
 14.2 Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.(Aryl thiophosphate (TPPT), phenolic antioxidant)
 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: -

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 2024/590/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

Product name: RENOLIN UNISYN CLP 46 NFR

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

Hazard category in accordance with Regulation (EC) No 1272/2008	Qualifying quantity for the application of Lower-tier requirements:	Qualifying quantity for the application of Upper-tier requirements:
E2: E2. Hazardous to the aquatic environment	200 t	500 t

SECTION 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.
- H332 Harmful if inhaled.
- H361f Suspected of damaging fertility.
- 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 complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially similar mixtures" - Expert Judgement

Revision Date:

18.02.2025

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.

Abbreviations and acronyms:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classifica-

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tion Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative