

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 - SE
(Commission Regulation (EU) 2020/878)



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 2022-09-08	Print Date: 2023-
4.4	2023-11-01	Date of first issue: 2015-06-22	11-01

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Klüberlub BE 41-1501

Article-No. : 097115

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

Use of the
Substance/Mixture : Grease

Recommended restrictions
on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : Klüber Lubrication München GmbH & Co. KG
Geisenhausenerstr. 7
81379 München
Deutschland
Tel.: +49 (0) 89 7876 0
Fax: +49 (0) 89 7876 333
info@klueber.com

E-mail address of person
responsible for the SDS : mcm@klueber.com
Material Compliance Management

National contact : Klüber Lubrication Nordic A/S
Vasagatan 36
111 20 Stockholm
Sweden
Tel: +46 8 59098600
Fax: +46 8 59098601
klueber.se@klueber.com

1.4 Emergency telephone number

Emergency telephone
number : 112 - ask for poison information

+49 89 7876 700 (24 hrs)

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KLÜBER
LUBRICATION

Klüberlub BE 41-1501

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:																	
Signal word	:	Warning																
Hazard statements	:	<table><tr><td>H315</td><td>Causes skin irritation.</td></tr><tr><td>H319</td><td>Causes serious eye irritation.</td></tr><tr><td>H412</td><td>Harmful to aquatic life with long lasting effects.</td></tr></table>	H315	Causes skin irritation.	H319	Causes serious eye irritation.	H412	Harmful to aquatic life with long lasting effects.										
H315	Causes skin irritation.																	
H319	Causes serious eye irritation.																	
H412	Harmful to aquatic life with long lasting effects.																	
Precautionary statements	:	<table><tr><td>Prevention:</td><td></td></tr><tr><td>P264</td><td>Wash skin thoroughly after handling.</td></tr><tr><td>P273</td><td>Avoid release to the environment.</td></tr><tr><td>P280</td><td>Wear protective gloves/ eye protection/ face protection.</td></tr><tr><td>Response:</td><td></td></tr><tr><td>P332 + P313</td><td>If skin irritation occurs: Get medical advice/ attention.</td></tr><tr><td>P337 + P313</td><td>If eye irritation persists: Get medical advice/ attention.</td></tr><tr><td>P362 + P364</td><td>Take off contaminated clothing and wash it before reuse.</td></tr></table>	Prevention:		P264	Wash skin thoroughly after handling.	P273	Avoid release to the environment.	P280	Wear protective gloves/ eye protection/ face protection.	Response:		P332 + P313	If skin irritation occurs: Get medical advice/ attention.	P337 + P313	If eye irritation persists: Get medical advice/ attention.	P362 + P364	Take off contaminated clothing and wash it before reuse.
Prevention:																		
P264	Wash skin thoroughly after handling.																	
P273	Avoid release to the environment.																	
P280	Wear protective gloves/ eye protection/ face protection.																	
Response:																		
P332 + P313	If skin irritation occurs: Get medical advice/ attention.																	
P337 + P313	If eye irritation persists: Get medical advice/ attention.																	
P362 + P364	Take off contaminated clothing and wash it before reuse.																	

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: 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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Toxicological information: 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mineral oil.
special lithium soap
solid lubricant

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
1,3,4-Thiadiazolidine- 2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol	91648-65-6 293-927-7 01-2119976351-35- XXXX	Aquatic Chronic3; H412		>= 1 - < 2,5
2-(2-heptadec-8-enyl- 2-imidazolin-1- yl)ethanol	95-38-5 202-414-9 01-2119777867-13- XXXX	Acute Tox.4; H302 Skin Corr.1C; H314 Eye Dam.1; H318 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 10/1	>= 1 - < 2,5
Substances with a workplace exposure limit :				
Residual oils (petroleum), solvent- dewaxed; Baseoil — unspecified	64742-62-7 265-166-0 649-471-00-X 01-2119480472-38- xxxx	Not classified	Note L	>= 50 - < 70
lithium 12- hydroxystearate	7620-77-1 231-536-5	Not classified		>= 1 - < 10

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	01-2119970893-23-XXXX 01-2119970893-23-XXXX 01-2119970893-23-XXXX 01-2119970893-23-XXXX			
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified	64742-52-5 265-155-0 649-465-00-7 01-2119467170-45-XXXX	Not classified	Note L	$\geq 1 - < 10$
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	64742-54-7 265-157-1 649-467-00-8 01-2119484627-25-XXXX	Not classified	Note L	$\geq 1 - < 10$
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified	64742-65-0 265-169-7 649-474-00-6 01-2119471299-27-XXXX	Not classified	Note L	$\geq 1 - < 10$

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.

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Wash clothing before reuse.
Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
Seek medical advice.

If swallowed : Move the victim to fresh air.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Skin contact may provoke the following symptoms:
Erythema

Risks : Causes skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NOx)
Sulphur oxides
Oxides of phosphorus
Metal oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

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Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Ensure adequate ventilation.
Do not breathe vapours, aerosols.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Do not get in eyes or mouth or on skin.
Do not get on skin or clothing.
Do not ingest.
Do not repack.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep container closed when not in use. Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified	64742-62-7	NGVTime Weighted Average (Mist)	1 mg/m3	SE AFS (2020-09-28)
		KGVShort Term Exposure Limit (Mist)	3 mg/m3	SE AFS (2020-09-28)
	Further information: Indicative short term limit value shall be used as a recommended maximum value and should not be exceeded			
lithium 12-hydroxystearate	7620-77-1	NGVTime Weighted Average (Total dust)	5 mg/m3	SE AFS (2018-02-19)
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified	64742-52-5	NGVTime Weighted Average (Mist)	1 mg/m3	SE AFS (2020-09-28)
		KGVShort Term Exposure Limit (Mist)	3 mg/m3	SE AFS (2020-09-28)
	Further information: Indicative short term limit value shall be used as a recommended maximum value and should not be exceeded			
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	64742-54-7	NGVTime Weighted Average (Mist)	1 mg/m3	SE AFS (2020-09-28)

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		KGVShort Term Exposure Limit (Mist)	3 mg/m3	SE AFS (2020-09-28)
Further information: Indicative short term limit value shall be used as a recommended maximum value and should not be exceeded				
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified	64742-65-0	NGVTime Weighted Average (Mist)	1 mg/m3	SE AFS (2020-09-28)
		KGVShort Term Exposure Limit (Mist)	3 mg/m3	SE AFS (2020-09-28)
Further information: Indicative short term limit value shall be used as a recommended maximum value and should not be exceeded				

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified	Workers	Inhalation	Long-term systemic effects	2,73 mg/m3
	Workers	Inhalation	Long-term local effects	5,58 mg/m3
	Workers	Dermal	Long-term systemic effects	0,97 mg/kg
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified	Workers	Inhalation	Long-term local effects	5,58 mg/m3
	Workers	Inhalation	Long-term systemic effects	2,73 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,97 mg/kg
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol	Workers	Inhalation	Long-term systemic effects	4,408 mg/m3
	Workers	Dermal	Long-term systemic effects	6,25 mg/kg bw/day
Reaction mass of p-t-butylphenyldiphenyl phosphate and bis(p-t-butylphenyl) phenyl phosphate	Workers	Inhalation	Long-term systemic effects	2,03 mg/m3
	Workers	Inhalation	Long-term local	0,2 mg/m3

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			effects	
	Workers	Dermal	Long-term systemic effects	0,056 mg/kg bw/day
	Workers	Dermal	Long-term local effects	0,001 mg/cm2
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	Workers	Skin contact	Long-term systemic effects	0,06 mg/kg
	Workers	Inhalation	Long-term systemic effects	0,46 mg/m3
	Workers	Skin contact	Acute systemic effects	2 mg/kg
	Workers	Inhalation	Acute systemic effects	14 mg/m3
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	Workers	Inhalation	Long-term local effects	5,58 mg/m3
	Workers	Inhalation	Long-term systemic effects	2,73 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,97 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified	Workers	Inhalation	Long-term systemic effects	2,73 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,97 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified	Oral	9,33 mg/kg
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified	Oral	9,33 mg/kg
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol	Fresh water	0,041 mg/l
	Marine water	0,004 mg/l
	Intermittent use/release	0,41 mg/l
	Sewage treatment plant	8000 mg/l
	Fresh water sediment	380,62 mg/kg dry weight (d.w.)
	Marine sediment	38,06 mg/kg dry weight (d.w.)

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	Soil	308,96 mg/kg dry weight (d.w.)
	Oral	6,67 mg/l
Reaction mass of p-t-butylphenyldiphenyl phosphate and bis(p-t-butylphenyl) phenyl phosphate	Fresh water	0,000116 mg/l
	Marine water	0,000012 mg/l
	Microbiological Activity in Sewage Treatment Systems	1 mg/l
	Fresh water sediment	0,51 mg/kg
	Marine sediment	0,051 mg/kg
	Soil	0,118 mg/kg
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	Fresh water	0,00003 mg/l
	Marine water	0,000003 mg/l
	Fresh water sediment	0,376 mg/kg
	Marine sediment	0,0376 mg/kg
	Soil	0,075 mg/kg
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	Oral	9,33 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified	Oral	9,33 mg/kg

8.2 Exposure controls

Engineering measures

none

Personal protective equipment

Eye/face protection : Safety glasses

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

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Respiratory protection	:	Not required; except in case of aerosol formation.
Filter type	:	Filter type P
Protective measures	:	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	paste
Colour	:	black
Odour	:	characteristic
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flammability (solid, gas)	:	Combustible Solids
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	Not applicable substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	Not applicable

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Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-
octanol/water : No data available

Vapour pressure : < 0,001 hPa (20 °C)

Relative density : 0,92 (20 °C)
Reference substance: Water
The value is calculated

Density : 0,92 g/cm³
(20 °C)

Bulk density : No data available

Relative vapour density : No data available

Particle characteristics

Particle size : Not applicable

Particle Size Distribution : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Sublimation point : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

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Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Symptoms: Redness, Local irritation

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Acute oral toxicity : LD50 (Rat): > 10.000 mg/kg
Method: OECD Test Guideline 401
GLP: no

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
GLP: no
Assessment: The substance or mixture has no acute dermal toxicity

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Acute oral toxicity : LD50 (Rat): 1.265 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal

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toxicity

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

lithium 12-hydroxystearate:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 3.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5,53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5,53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

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Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg
Method: OECD Test Guideline 402

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Product:

Remarks : Irritating to skin.

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Species : Rabbit
Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation
GLP : no

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.
GLP : yes

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Species : Rabbit
Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation
GLP : yes

lithium 12-hydroxystearate:

Assessment : No skin irritation
Method : OECD Test Guideline 439
Result : No skin irritation

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

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Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

Serious eye damage/eye irritation

Product:

Remarks	:	Irritating to eyes.
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Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
GLP	:	no

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Species	:	Rabbit
Assessment	:	Corrosive
Method	:	OECD Test Guideline 405
Result	:	Corrosive

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
GLP	:	yes

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lithium 12-hydroxystearate:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
GLP	:	yes

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
GLP	:	yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
GLP	:	yes

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Test Type	:	Buehler Test
Exposure routes	:	Dermal
Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
GLP	:	yes

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

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Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Species	:	Guinea pig
Assessment	:	Did not cause sensitisation on laboratory animals.
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.
GLP	:	yes

lithium 12-hydroxystearate:

Exposure routes	:	Dermal
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	negative

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
GLP	:	yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
GLP	:	yes

Germ cell mutagenicity

Product:

Genotoxicity in vitro	:	Remarks: No data available
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Genotoxicity in vivo : Remarks: No data available

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Cell type: Bone marrow
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Genotoxicity in vitro : Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

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Carcinogenicity

Product:

Remarks : No data available

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Carcinogenicity - : No evidence of carcinogenicity in animal studies.
Assessment

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Carcinogenicity - : No evidence of carcinogenicity in animal studies.
Assessment

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Carcinogenicity - : Not classifiable as a human carcinogen.
Assessment

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Carcinogenicity - : Not classifiable as a human carcinogen.
Assessment

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species : Mouse
Application Route : Dermal
Method : OECD Test Guideline 451
Result : negative

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal : Remarks: No data available
development

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Reproductive toxicity - : - Fertility -
Assessment : No toxicity to reproduction
- Teratogenicity -

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No effects on or via lactation

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Reproductive toxicity - : - Fertility -
Assessment
Animal testing did not show any effects on fertility.
- Teratogenicity -
Did not show teratogenic effects in animal experiments.

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Reproductive toxicity - : - Fertility -
Assessment
No toxicity to reproduction
- Teratogenicity -
No effects on or via lactation

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Effects on foetal : Species: Rat
development Application Route: Dermal
General Toxicity Maternal: LOAEL: 125 mg/kg body weight
Teratogenicity: NOAEL: $\geq$ 2.000 mg/kg body weight
Developmental Toxicity: NOAEL: $\geq$ 2.000 mg/kg body weight
Embryo-foetal toxicity: NOAEL: $\geq$ 2.000 mg/kg body weight
Method: OECD Test Guideline 414
Result: No effects on fertility and early embryonic
development were detected.

Reproductive toxicity - : - Fertility -
Assessment
No toxicity to reproduction
- Teratogenicity -
No toxicity to reproduction

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Reproductive toxicity - : - Fertility -
Assessment
No toxicity to reproduction

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Effects on foetal : Species: Rat
development Application Route: Dermal
General Toxicity Maternal: NOAEL: 30 mg/kg body weight
Developmental Toxicity: NOAEL: 30 mg/kg body weight
Method: OECD Test Guideline 414

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STOT - single exposure

Product:

Remarks : No data available

Components:

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Product:

Remarks : No data available

Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Exposure routes : Ingestion
Target Organs : Digestive organs, thymus gland
Assessment : May cause damage to organs through prolonged or repeated exposure.

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Product:

Remarks : This information is not available.

Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Species : Rat
: 100 mg/kg
NOAEL : 20 mg/kg
Application Route : Oral

Aspiration toxicity

Product:

This information is not available.

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Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

No aspiration toxicity classification

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

No aspiration toxicity classification

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

No aspiration toxicity classification

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

No aspiration toxicity classification

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : 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.

Further information

Product:

Remarks : Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Remarks: Harmful to aquatic organisms, may cause long-term

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adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1.000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 41 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (Pseudomonas putida): 8.000 mg/l
Exposure time: 16 h
Test Type: Growth inhibition
Method: DIN 38 412 Part 8

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 0,3 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,163 mg/l
Exposure time: 48 h
Test Type: Immobilization
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 0,03 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

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M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (activated sludge): 26 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

M-Factor (Chronic aquatic toxicity) : 1

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

NOEC (Pimephales promelas (fathead minnow)): >= 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : LC50 : > 10.000 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 202

NOEC : >= 10.000 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

lithium 12-hydroxystearate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h

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Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 160 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 160 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10.000 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : LC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR: >= 1.000 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
Remarks: The value is calculated

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: Reproduction Test
Method: OECD Test Guideline 211

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10.000 mg/l
Exposure time: 48 h
Test Type: Immobilization
Method: OECD Test Guideline 202

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GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10.000 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 2 %
Exposure time: 28 d
Method: OECD Test Guideline 301

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2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Biodegradability : Test Type: Primary biodegradation
Result: Not rapidly biodegradable
Method: OECD Test Guideline 301B

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 3 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

lithium 12-hydroxystearate:

Biodegradability : Test Type: Primary biodegradation
Inoculum: activated sludge
Result: rapidly biodegradable
Biodegradation: 74,7 %
Exposure time: 28 d
Method: OECD Test Guideline 301C

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 3 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 3 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 31 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

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GLP: yes

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 15,7

Partition coefficient: n-octanol/water : log Pow: 9,4 (30 °C)
pH: 7
Method: OECD Test Guideline 107

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Bioaccumulation : Bioconcentration factor (BCF): 371,8
Remarks: Does not accumulate in organisms.

Partition coefficient: n-octanol/water : log Pow: > 6

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : Pow: > 3,5

lithium 12-hydroxystearate:

Partition coefficient: n-octanol/water : log Pow: 2,6

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Partition coefficient: n-octanol/water : log Pow: > 2

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

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Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol:

Assessment : Non-classified PBT substance. Non-classified vPvB substance

Residual oils (petroleum), solvent-dewaxed; Baseoil — unspecified:

Assessment : This substance is not considered to be very persistent and very bioaccumulating (vPvB).. This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified:

Assessment : Non-classified PBT substance. Non-classified vPvB substance

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Assessment : Non-classified vPvB substance. Non-classified PBT substance

12.6 Endocrine disrupting properties

Product:

Assessment : 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.

12.7 Other adverse effects

Product:

Additional ecological information : Harmful to aquatic life with long lasting effects.

Harmful to aquatic life with long lasting effects.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : The product should not be allowed to enter drains, water courses or the soil.
Do not dispose of with domestic refuse.
Dispose of as hazardous waste in compliance with local and national regulations.
- Waste codes should be assigned by the user based on the application for which the product was used.
- Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.
Dispose of waste product or used containers according to local regulations.
- The following Waste Codes are only suggestions:
- Waste Code : used product, unused product
12 01 12*, spent waxes and fats
- uncleaned packagings
15 01 10*, packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

- ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

- ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

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ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
IATA	:	Not regulated as a dangerous good

14.4 Packing group

ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
IATA (Cargo)	:	Not regulated as a dangerous good
IATA (Passenger)	:	Not regulated as a dangerous good

14.5 Environmental hazards

ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). (EU SVHC)	:	This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer (EC 1005/2009)	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast) (EU POP)	:	Not applicable

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Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals (EU PIC) : Not applicable

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)
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Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Not applicable

Other regulations:

Hygiene limits (AFS 2018:1), provisions - Occupational Safety and Health Administration's provisions on hygiene limits and general advice on the application of the provisions.

Take note of the Swedish Work Environment Authority regulations on Chemical Hazards in the Working Environment (AFS 2011:19)

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-Statements

H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.

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H373 : May cause damage to organs through prolonged or repeated exposure if swallowed.
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.

Full text of other abbreviations

Note L : The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

SE AFS : Sweden. Occupational Exposure Limit Values
SE AFS / NGV : Time Weighted Average
SE AFS / KGV : Short Term Exposure Limit

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 - Classification 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; 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

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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

Further information

Classification of the mixture:

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Aquatic Chronic 3	H412

Classification procedure:

Calculation method
Calculation method
Calculation method

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