

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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 Sub-
stance/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
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 Deutschland
Geisenhausenerstraße 7
81379 München
Deutschland
Tel.: +49 89 7876 0
Fax: +49 89 7876 565
customer.service.de@klueber.com
www.klueber.com

1.4 Emergency telephone number

Emergency telephone num-
ber : +49 89 7876 700 (24 hrs)

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.

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Eye irritation, Category 2

H319: Causes serious eye irritation.

Long-term (chronic) aquatic hazard, Category 2

H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H411	Toxic to aquatic life with long lasting effects.

Precautionary statements	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.	
P391	Collect spillage.	

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.

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version 3.5	Revision Date: 22.12.2021	Date of last issue: 21.04.2020 Date of first issue: 22.06.2015	Print Date: 22.12.2021
----------------	------------------------------	---	---------------------------

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-dodecanethiol	939-692-2 01-2119983498-16-XXXX	Aquatic Chronic3; H412		$\geq 1 - < 2,5$
Phenol, isopropylated, phosphate (3:1)	68937-41-7 273-066-3 01-2119535109-41-XXXX	Repr.2; H361 STOT RE2; H373 Aquatic Chronic1; H410	M-Factor: /10	$\geq 1 - < 2,5$
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	$\geq 1 - < 2,5$
triphenyl phosphate	115-86-6 204-112-2	Aquatic Acute1; H400 Aquatic Chronic2; H411	M-Factor: 1/1	$\geq 0,25 - < 1$
Substances with a workplace exposure limit :				
residual oils (petroleum), solvent-dewaxed	64742-62-7 265-166-0 649-471-00-X 01-2119480472-38-XXXX	Not classified	Note L	$\geq 50 - < 70$
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	$\geq 1 - < 10$

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version 3.5	Revision Date: 22.12.2021	Date of last issue: 21.04.2020 Date of first issue: 22.06.2015	Print Date: 22.12.2021
----------------	------------------------------	---	---------------------------

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	64742-65-0 265-169-7 649-474-00-6 01-2119471299-27- XXXX	Not classified	Note L	$\geq 1 - < 10$
Graphite	7782-42-5 231-955-3	Not classified		$\geq 1 - < 10$

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- | | |
|-------------------------|---|
| If inhaled | : Obtain medical attention.
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.
Get medical attention immediately if irritation develops and persists.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
Wash off immediately with plenty of water. |
| 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. |

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Obtain medical attention.
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 (NO_x)
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.
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.
Use the indicated respiratory protection if the occupational

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

exposure limit is exceeded and/or in case of product release (dust).
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 : Clean up promptly by sweeping or vacuum.
Keep in suitable, closed containers for disposal.

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.

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.

Storage class (TRGS 510) : 11, Combustible Solids

7.3 Specific end use(s)

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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	64742-62-7	AGW (Vapour and aerosols)	5 mg/m ³	DE TRGS 900 (2018-06-07)
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil — unspecified	64742-52-5	AGW (Vapour and aerosols)	5 mg/m ³	DE TRGS 900 (2018-06-07)
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Phenol, isopropylated, phosphate (3:1)	68937-41-7	AGW (Inhalable fraction)	1 mg/m ³	DE TRGS 900 (2016-11-04)
	Peak-limit: excursion factor (category): 2;(II)			
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified	64742-54-7	AGW (Vapour and aerosols)	5 mg/m ³	DE TRGS 900 (2018-06-07)
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	AGW (Vapour and aerosols)	5 mg/m ³	DE TRGS 900 (2018-06-07)
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Graphite	7782-42-5	AGW (Inhalable fraction)	10 mg/m ³	DE TRGS 900 (2014-04-02)
	Peak-limit: excursion factor (category): 2;(II)			
		AGW (Alveolate fraction)	1,25 mg/m ³	DE TRGS 900 (2014-04-02)

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Peak-limit: excursion factor (category): 2;(II)

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	Workers	Inhalation	Long-term systemic effects	2,7 mg/m3
	Workers	Inhalation	Long-term local effects	5,6 mg/m3
	Workers	Dermal	Long-term systemic effects	1 mg/kg bw/day
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol	Workers	Inhalation	Long-term systemic effects	4,408 mg/m3
	Workers	Skin contact	Long-term systemic effects	6,25 mg/kg bw/day
Phenol, isopropylated, phosphate (3:1)	Workers	Inhalation	Long-term systemic effects	0,145 mg/m3
	Workers	Inhalation	Acute systemic effects	700 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,416 mg/kg bw/day
	Workers	Skin contact	Acute systemic effects	2000 mg/kg bw/day
	Workers	Skin contact	Acute local effects	16 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	5,6 mg/m3
triphenyl phosphate	Workers	Inhalation	Long-term systemic effects	5,2 mg/m3
	Workers	Skin contact	Long-term systemic effects	5,55 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
residual oils (petroleum), solvent-dewaxed	Oral	9,33 mg/kg
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-	Fresh water	0,041 mg/l

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

dodecanethiol		
	Marine water	0,0041 mg/l
	Intermittent use/release	0,41 mg/l
	Microbiological Activity in Sewage Treatment Systems	8000 mg/l
	Fresh water sediment	380,62 mg/kg
	Marine sediment	38,06 mg/kg
	Soil	308,98 mg/kg
	Oral	6,67 mg/kg
Phenol, isopropylated, phosphate (3:1)	Fresh water	0 mg/l
	Intermittent use/release	0,015 mg/l
	Marine water	0 mg/l
	Sewage treatment plant	100 mg/kg
	Fresh water sediment	0,185 mg/kg dry weight (d.w.)
	Marine sediment	0,018 mg/kg dry weight (d.w.)
	Soil	2,5 mg/kg dry weight (d.w.)
	Oral	1,85 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	Oral	9,33 mg/kg
triphenyl phosphate	Fresh water	0,004 mg/l
	Intermittent use/release	0,003 mg/l
	Marine water	0,0004 mg/l
	Sewage treatment plant	5 mg/l
	Fresh water sediment	1,103 mg/kg dry weight (d.w.)
	Marine sediment	0,11 mg/kg dry weight (d.w.)
	Soil	0,218 mg/kg dry weight (d.w.)
	Oral	16,667 mg/kg

8.2 Exposure controls

Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye protection : Safety glasses with side-shields

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version 3.5	Revision Date: 22.12.2021	Date of last issue: 21.04.2020 Date of first issue: 22.06.2015	Print Date: 22.12.2021
----------------	------------------------------	---	---------------------------

Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition 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
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/cm ³ (20 °C)
Bulk density	:	No data available
Relative vapour density	:	No data available

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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

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-dodecanethiol:

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

Acute inhalation toxicity : LC50 (Rat): > 2,75 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: An LC50/inhalation/4h/rat could not be determined

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

because no mortality of rats was observed at the maximum achievable concentration.
Information given is based on data obtained from similar substances.

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Information given is based on data obtained from similar substances.

Phenol, isopropylated, phosphate (3:1):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 200 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 10.000 mg/kg
GLP: no

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 toxicity

triphenyl phosphate:

Acute oral toxicity : LD50 (Rat): > 20.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 200 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 10.000 mg/kg
Method: OECD Test Guideline 402

residual oils (petroleum), solvent-dewaxed:

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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

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

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

distillates (petroleum), solvent-dewaxed heavy paraffinic:

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

Graphite:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 423
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): > 2.000 mg/l

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Skin corrosion/irritation

Product:

Remarks : Irritating to skin.

Components:

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

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

Phenol, isopropylated, phosphate (3:1):

Species : Rabbit
Exposure time : 72 h
Assessment : No skin irritation
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

triphenyl phosphate:

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

residual oils (petroleum), solvent-dewaxed:

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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

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:

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

Graphite:

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

Serious eye damage/eye irritation

Product:

Remarks : Irritating to eyes.

Components:

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

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

Phenol, isopropylated, phosphate (3:1):

Species	:	Rabbit
Assessment	:	No eye irritation
Result	:	No eye irritation
GLP	:	no

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

Species	:	Rabbit
---------	---	--------

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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

triphenyl phosphate:

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

residual oils (petroleum), solvent-dewaxed:

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

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:

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

Graphite:

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

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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-dodecanethiol:

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

Phenol, isopropylated, phosphate (3:1):

Species	: Mouse
Assessment	: Did not cause sensitisation on laboratory animals.
Method	: OECD Test Guideline 429
Result	: Did not cause sensitisation on laboratory animals.
GLP	: yes

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

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

triphenyl phosphate:

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

residual oils (petroleum), solvent-dewaxed:

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

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

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

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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:

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

Graphite:

Species : Mouse
Method : OECD Test Guideline 429
Result : negative

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

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

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
Remarks: Information given is based on data obtained from similar substances.

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.

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

triphenyl phosphate:

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

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

residual oils (petroleum), solvent-dewaxed:

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:

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

Graphite:

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)
Method: OECD Test Guideline 471
Result: negative

Test Type: gene mutation test
Method: OECD Test Guideline 476
Result: negative

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

Carcinogenicity

Product:

Remarks : No data available

Components:

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

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

triphenyl phosphate:

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

residual oils (petroleum), solvent-dewaxed:

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

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

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

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

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

distillates (petroleum), solvent-dewaxed heavy paraffinic:

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 development : Remarks: No data available

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Components:

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

Effects on fertility : Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: 1.000 mg/kg body weight
General Toxicity F1: NOAEL: 1.000 mg/kg body weight
Method: OECD Test Guideline 421
Remarks: Information given is based on data obtained from similar substances.

Reproductive toxicity - Assessment : - Fertility -
No toxicity to reproduction
- Teratogenicity -
Animal testing did not show any effects on foetal development.

Phenol, isopropylated, phosphate (3:1):

Reproductive toxicity - Assessment : - Fertility -
Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
- Teratogenicity -
Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

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

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

triphenyl phosphate:

Effects on foetal development : Species: Rabbit
Application Route: Oral
General Toxicity Maternal: NOAEL: \geq 200 mg/kg body weight
Teratogenicity: NOAEL: \geq 200 mg/kg body weight
Developmental Toxicity: NOAEL: \geq 200 mg/kg body weight
Embryo-foetal toxicity: NOAEL: \geq 200 mg/kg body weight
Method: OECD Test Guideline 414
Result: No effects on fertility and early embryonic development were detected.

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

No effects on or via lactation

residual oils (petroleum), solvent-dewaxed:

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

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

Effects on foetal development : Species: Rat
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 - Assessment : - Fertility -
No toxicity to reproduction
- Teratogenicity -
No toxicity to reproduction

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

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

distillates (petroleum), solvent-dewaxed heavy paraffinic:

Effects on foetal development : Species: Rat
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

Graphite:

Effects on fertility : Species: Rat
Application Route: Oral
General Toxicity F1: NOAEL: 813 mg/kg body weight
Method: OECD Test Guideline 422

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

STOT - single exposure

Components:

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

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

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

Components:

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

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

Phenol, isopropylated, phosphate (3:1):

Exposure routes : Ingestion
Target Organs : ovaries, Testes, Liver, Adrenal gland
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

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:

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

Species : Rat
NOAEL : 250 mg/kg

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Application Route : Oral
Method : OECD Test Guideline 421
Remarks : Information given is based on data obtained from similar substances.

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

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

triphenyl phosphate:

Species : Rat
NOAEL : 105 mg/kg
Application Route : Oral
Method : OECD Test Guideline 408

Species : Rabbit
NOAEL : 1.000 mg/kg
Application Route : Dermal

Graphite:

Species : Rat
NOAEL : 813 mg/kg
Application Route : Oral
Method : OECD Test Guideline 422

Species : Rat
NOAEL : > 2 mg/l
Application Route : inhalation (dust/mist/fume)
Method : OECD Test Guideline 412

Aspiration toxicity

Product:

This information is not available.

Components:

Phenol, isopropylated, phosphate (3:1):

No aspiration toxicity classification

triphenyl phosphate:

No aspiration toxicity classification

residual oils (petroleum), solvent-dewaxed:

No aspiration toxicity classification

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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:

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: Toxic to aquatic organisms, may cause long-term 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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Components:

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

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 1.000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (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 Test Type: Growth inhibition Method: OECD Test Guideline 201

Ecotoxicology Assessment

Acute aquatic toxicity	:	Harmful to aquatic life.
Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.

Phenol, isopropylated, phosphate (3:1):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 1,6 mg/l Exposure time: 96 h Test Type: static test Remarks: Information given is based on tests on the mixture itself.
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2,44 mg/l Exposure time: 48 h Test Type: semi-static test Remarks: Information given is based on tests on the mixture itself.
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 2,5 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes Remarks: Information given is based on tests on the mixture itself.
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,0031 mg/l Exposure time: 33 d Species: Pimephales promelas (fathead minnow) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic)	:	NOEC: 0,0415 mg/l Exposure time: 21 d

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

ic toxicity) Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 10

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

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

triphenyl phosphate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,4 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,36 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): 0,25 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

EL10 (Pseudokirchneriella subcapitata (green algae)): 0,25 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : NOEC (activated sludge): 100 mg/l
Exposure time: 28 h

Toxicity to fish (Chronic toxicity) : NOEC: 0,037 mg/l
Exposure time: 30 d
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,254 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

residual oils (petroleum), solvent-dewaxed:

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

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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
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:

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

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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)

Graphite:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	(Daphnia magna (Water flea)): > 100 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

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-dodecanethiol:

Biodegradability	:	Test Type: Primary biodegradation Inoculum: activated sludge Result: Not readily biodegradable. Biodegradation: 0 % Exposure time: 28 d Method: OECD Test Guideline 301C
------------------	---	---

Phenol, isopropylated, phosphate (3:1):

Biodegradability	:	Result: Not rapidly biodegradable
------------------	---	-----------------------------------

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Biodegradation: 17,9 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

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

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

triphenyl phosphate:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 83 - 94 %
Exposure time: 28 d
Method: OECD Test Guideline 301C

residual oils (petroleum), solvent-dewaxed:

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 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:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Result: Not rapidly biodegradable
Biodegradation: 31 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Graphite:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

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-dodecanethiol:

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 3,16

Partition coefficient: n-octanol/water : log Pow: 8 (20 °C)

Phenol, isopropylated, phosphate (3:1):

Partition coefficient: n-octanol/water : log Pow: 4,92 - 5,17 (25 °C)

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

triphenyl phosphate:

Bioaccumulation : Species: Oryzias latipes (Orange-red killifish)
Exposure time: 18 d
Concentration: 0,01 mg/l
Bioconcentration factor (BCF): 144

Partition coefficient: n-octanol/water : log Pow: 4,6 (20 °C)

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version 3.5	Revision Date: 22.12.2021	Date of last issue: 21.04.2020 Date of first issue: 22.06.2015	Print Date: 22.12.2021
----------------	------------------------------	---	---------------------------

residual oils (petroleum), solvent-dewaxed:

Bioaccumulation : Remarks: No data available

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

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

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:

Phenol, isopropylated, phosphate (3:1):

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

residual oils (petroleum), solvent-dewaxed:

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:

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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.

Toxic to aquatic life with long lasting effects.

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

ADN : UN 3077
ADR : UN 3077

SAFETY DATA SHEET

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

KLÜBER
LUBRICATION

Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

RID : UN 3077
IMDG : UN 3077
IATA : UN 3077

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(Triaryl Phosphate Isopropylated)
ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(Triaryl Phosphate Isopropylated)
RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(Triaryl Phosphate Isopropylated)
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(Triaryl Phosphate Isopropylated)
IATA : Environmentally hazardous substance, solid, n.o.s.
(Triaryl Phosphate Isopropylated)

14.3 Transport hazard class(es)

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADN
Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

ADR
Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

RID
Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

IMDG
Packing group : III

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft) : 956
Packing instruction (LQ) : Y956
Packing group : III
Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft) : 956
Packing instruction (LQ) : Y956
Packing group : III
Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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, preparations and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regu-

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	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.	:	E2	ENVIRONMENTAL HAZARDS
---	---	----	-----------------------

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)

Water contaminating class (Germany)	:	WGK 3 highly hazardous to water Classification according to AwSV, Annex 1 (5.2)
-------------------------------------	---	--

TA Luft List (Germany)	:	Total dust: others: 26,13 %
------------------------	---	--------------------------------

Inorganic substances in powdered form:
Not applicable
Inorganic substances in vapour or gaseous form:
Not applicable
Organic Substances:
portion Class 1: 2,2 %
others: 71,67 %

Carcinogenic substances:
Not applicable
Mutagenic:
Not applicable
Toxic to reproduction:

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 1,7 %

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.
H361	: Suspected of damaging fertility or the unborn child.
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.
H411	: 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 classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO 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. This note applies only to certain complex oil-derived substances in Part 3.
DE TRGS 900	: Germany. TRGS 900 - Occupational exposure limit values.
DE TRGS 900 / AGW	: Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - 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 -

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021

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 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; 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 2	H411

Classification procedure:

Calculation method
Calculation method
Calculation method

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.

SAFETY DATA SHEET

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



Klüberlub BE 41-1501

Version	Revision Date:	Date of last issue: 21.04.2020	Print Date:
3.5	22.12.2021	Date of first issue: 22.06.2015	22.12.2021
