according to Regulation (EC) No. 1907/2006 - DE



# Klüberplex BE 11-462

 Version
 Revision Date:
 Date of last issue: 07.12.2020
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 05.07.2021
 Date of first issue: 22.09.2016
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#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Klüberplex BE 11-462

Article-No. : 097111

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

Use of the Sub- : Grease

stance/Mixture

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 : mcm@klueber.com

responsible for the SDS 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- : +49 89 7876 700 (24 hrs)

ber

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

### Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.

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#### 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

<u>(!</u>)

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : Prevention:

P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with wa-

ter for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

#### 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.

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature : Mineral oil.

aluminium complex soap

#### Components

Chemical name	CAS-No. EC-No.	Classification	Concentration limits M-Factor Notes	Concentration (% w/w)
	Registration number			
Polysulfides, di-tert- dodecyl	68425-15-0 270-335-7 01-2119540516-41- XXXX	Aquatic Chronic4; H413		>= 1 - < 2,5
1,3,4-Thiadiazolidine-		Aquatic Chronic3;		>= 1 - < 2,5

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2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol	939-692-2 01-2119983498-16- XXXX	H412		
N-methyl-N-[C18- (unsaturat- ed)alkanoyl]glycine	701-177-3 01-2119488991-20- XXXX	Acute Tox.4; H332 Skin Irrit.2; H315 Eye Dam.1; H318 Aquatic Acute1; H400 Aquatic Chronic3; H412	M-Factor: 1/	>= 1 - < 2,5
Substances with a work		1		
residual oils (petrole-	64742-57-0	Not classified		>= 70 - < 90
um), hydrotreated	265-160-8		Ni. ( . I	
	649-470-00-4 01-2119489287-22- XXXX		Note L	
residual oils (petrole-	64742-62-7	Not classified		>= 1 - < 10
um), solvent-dewaxed	265-166-0 649-471-00-X		Note L	
	01-2119480472-38- xxxx			
distillates (petroleum),	64742-65-0	Not classified		>= 1 - < 10
solvent-dewaxed	265-169-7			
heavy paraffinic			Note L	
	649-474-00-6 01-2119471299-27- XXXX			

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 respira-

tion.

In case of skin contact : Take off all contaminated clothing immediately.



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Wash off immediately with soap and plenty of water.

Get medical attention immediately if irritation develops and

persists.

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 : No information available.

Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

#### **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod-

ucts

: Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides 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 decomposi-

tion products may be a hazard to health.

Further information : Standard procedure for chemical fires.

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#### **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 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 ap-

plication 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



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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)

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 (petro- leum), hydrotreat- ed	64742-57-0	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900 (2018-06-07)
Peak-limit: excursion factor (category)	4;(II)			
Further information		s compliance with the arming the unborn ch	e OEL and biological tolera nild	nce values, there
residual oils (petro- leum), solvent- dewaxed	64742-62-7	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900 (2018-06-07)
Peak-limit: excursion factor (category)	4;(II)			
Further information		s compliance with the arming the unborn ch	e OEL and biological tolera nild	nce values, there
distillates (petrole- um), solvent- dewaxed heavy paraffinic	64742-65-0	AGW (Vapour and aerosols)	5 mg/m3	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			
Polysulfides, di- tert-dodecyl	68425-15-0	AGW (Alveolate fraction)	5 mg/m3	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			



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(ι	-methyl-N-[C18- unsaturat- d)alkanoyl]glycine	Not As- signed	AGW (Inhalable fraction)	0,05 mg/m3	DE TRGS 900 (2019-03-29)
Р	eak-limit: excur-	2;(II)			
s	ion factor (catego-				
r۱	<i>(</i> )				

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

Substance name	End Use	Exposure routes	Potential health effects	Value
residual oils (petrole- um), hydrotreated	Workers	Inhalation	Long-term systemic effects	2,7 mg/m3
	Workers	Inhalation	Acute systemic effects	5,6 mg/m3
	Workers	Skin contact	Long-term systemic effects	1 mg/kg
residual oils (petrole- um), solvent-dewaxed	Workers	Inhalation	Long-term systemic effects	2,7 mg/m3
	Workers	Inhalation	Long-term local ef- fects	5,6 mg/m3
	Workers	Dermal	Long-term systemic effects	1 mg/kg bw/day
Polysulfides, di-tert- dodecyl	Workers	Inhalation	Long-term systemic effects	23,5 mg/m3
	Workers	Skin contact	Long-term systemic effects	33,3 mg/m3
bis(4-(1,1,3,3- tetramethyl- butyl)phenyl)amine	Workers	Inhalation	Long-term systemic effects	4,11 mg/m3
	Workers	Skin contact	Long-term systemic effects	1,17 mg/kg bw/day
1,3,4-Thiadiazolidine- 2,5-dithione, reaction products with hydro- gen 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
N-methyl-N-[C18- (unsaturat- ed)alkanoyl]glycine	Workers	Inhalation	Long-term systemic effects	0,8 mg/m3
	Workers	Skin contact	Long-term systemic effects	4,2 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-	Oral	9,33 mg/kg
dewaxed		
distillates (petroleum), solvent-	Oral	9,33 mg/kg
dewaxed heavy paraffinic		
Polysulfides, di-tert-dodecyl	Sewage treatment plant	1000 mg/l
bis(4-(1,1,3,3-	Fresh water	0,00002 μg/l



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tetramethylbutyl)phenyl)amine		
	Marine water	0,000002 µg/l
	Fresh water sediment	0,00467 mg/kg
	Marine sediment	0,000467 mg/kg
	Soil	0,000934 mg/kg
1,3,4-Thiadiazolidine-2,5- dithione, reaction products with hydrogen peroxide and tert- dodecanethiol	Fresh water	0,041 mg/l
	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
N-methyl-N-[C18- (unsaturated)alkanoyl]glycine	Fresh water	0,00043 mg/l
	Marine water	0,000043 mg/l
	Microbiological Activity in Sewage Treatment Systems	1 mg/l
	Fresh water sediment	0,057 mg/kg
	Marine sediment	0,006 mg/kg
	Soil	1,71 mg/kg

## 8.2 Exposure controls

### **Engineering measures**

none

## Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection

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

Remarks : For prolonged or repeated contact use 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

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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 spe-

cific work-place.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Appearance : paste

Colour : brown

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

substance/mixture is non-soluble (in water)

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : 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

Vapour pressure : < 0,001 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0,92 (20 °C)

Reference substance: Water The value is calculated

Density : 0,92 g/cm3

(20 °C)



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Bulk density : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : No data available

9.2 Other information

Sublimation point : No data available

Self-ignition : 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

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.



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#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

## **Acute toxicity**

**Product:** 

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

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

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

**Components:** 

Polysulfides, di-tert-dodecyl:

Acute oral toxicity : LD50 (Rat): 19.550 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 15,5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

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 inhala-

tion toxicity

Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum

achievable concentration.

Information given is based on data obtained from similar sub-

stances.



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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.

N-methyl-N-[C18-(unsaturated)alkanoyl]glycine:

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

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male): 1,05 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

residual oils (petroleum), hydrotreated:

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

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 5.000 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

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

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

Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.

**Components:** 

Polysulfides, di-tert-dodecyl:

Species : Rabbit

Assessment : No skin irritation

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Method : OECD Test Guideline 404

Result : Mild skin irritation

# 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

#### N-methyl-N-[C18-(unsaturated)alkanoyl]glycine:

Species : Rabbit

Assessment : Irritating to skin. Result : Irritating to skin.

#### residual oils (petroleum), hydrotreated:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

#### residual oils (petroleum), solvent-dewaxed:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : ves

#### distillates (petroleum), solvent-dewaxed heavy paraffinic:

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.

#### **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



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## N-methyl-N-[C18-(unsaturated)alkanoyl]glycine:

Species : Rabbit

Assessment : Risk of serious damage to eyes. Result : Risk of serious damage to eyes.

#### residual oils (petroleum), hydrotreated:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

#### residual oils (petroleum), solvent-dewaxed:

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

#### Respiratory or skin sensitisation

#### **Product:**

Remarks : This information is not available.

#### Components:

#### Polysulfides, di-tert-dodecyl:

Species : Rabbit

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

Assessment : Causes mild skin irritation.

# 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.

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## N-methyl-N-[C18-(unsaturated)alkanoyl]glycine:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

### residual oils (petroleum), hydrotreated:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Assessment : Does not cause respiratory sensitisation. Result : Does not cause respiratory sensitisation.

#### 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), 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

#### Germ cell mutagenicity

#### **Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

#### **Components:**

#### Polysulfides, di-tert-dodecyl:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Rat (female)

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Method: Mutagenicity (micronucleus test)

Result: negative

GLP: yes

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

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- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

residual oils (petroleum), solvent-dewaxed:

Germ cell mutagenicity- As-

sessment

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

Carcinogenicity

**Product:** 

Remarks : No data available

**Components:** 

Polysulfides, di-tert-dodecyl:

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

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

Carcinogenicity - Assess- : Not classifiable as a human carcinogen.

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ment

residual oils (petroleum), hydrotreated:

Carcinogenicity - Assess-

ment

: Not classifiable as a human carcinogen.

residual oils (petroleum), solvent-dewaxed:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

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 develop-

ment

Remarks: No data available

Components:

Polysulfides, di-tert-dodecyl:

Reproductive toxicity - As-

sessment

Animal testing did not show any effects on fertility.

Animal testing did not show any effects on foetal develop-

ment.

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 - As-

sessment

: No toxicity to reproduction

Animal testing did not show any effects on foetal develop-

ment.

residual oils (petroleum), solvent-dewaxed:

Reproductive toxicity - As-

sessment

No toxicity to reproduction

No effects on or via lactation



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#### distillates (petroleum), solvent-dewaxed heavy paraffinic:

Effects on foetal develop: Species: Rat

ment 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

#### 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.

#### 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.

#### Repeated dose toxicity

# **Product:**

Remarks : This information is not available.

#### **Components:**

#### Polysulfides, di-tert-dodecyl:

Species : Rat

NOAEL : 1.000 mg/kg

Application Route : Oral

Method : OECD Test Guideline 407

GLP : yes

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

Species : Rat NOAEL : 250 mg/kg Application Route : Oral

Method : OECD Test Guideline 421

Remarks : Information given is based on data obtained from similar sub-

stances.

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#### **Aspiration toxicity**

#### **Product:**

This information is not available.

#### Components:

### Polysulfides, di-tert-dodecyl:

No aspiration toxicity classification

#### residual oils (petroleum), hydrotreated:

No aspiration toxicity classification

### residual oils (petroleum), solvent-dewaxed:

No aspiration toxicity classification

#### distillates (petroleum), solvent-dewaxed heavy paraffinic:

No aspiration toxicity classification

#### **Further information**

#### **Product:**

Remarks : Information given is based on data on the components and

the toxicology of similar products.

### **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Product:** 

Toxicity to fish : Remarks: Harmful to aquatic organisms.

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:**

Polysulfides, di-tert-dodecyl:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

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Method: OECD Test Guideline 203

GLP: yes

Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other :

aquatic invertebrates

(Daphnia magna (Water flea)): Exposure time: 48 h

Remarks: No toxicity at the limit of solubility

Toxicity to algae/aquatic

plants

(Pseudokirchneriella subcapitata (green algae)): Exposure

time: 72 h

Remarks: No toxicity at the limit of solubility

Toxicity to microorganisms : NOEC (Pseudomonas putida): 10.000 mg/l

Exposure time: 16 h

Test Type: Growth inhibition

**Ecotoxicology Assessment** 

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

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.

N-methyl-N-[C18-(unsaturated)alkanoyl]glycine:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 0,43 mg/l

Exposure time: 96 h

Test Type: flow-through test Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0,43 mg/l

Exposure time: 48 h Test Type: static test

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Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 6,3 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

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**Ecotoxicology Assessment** 

Acute aquatic toxicity : Very toxic to aquatic life.

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

residual oils (petroleum), hydrotreated:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h Test Type: Immobilization

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



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Method: OECD Test Guideline 201

distillates (petroleum), solvent-dewaxed heavy paraffinic:

LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Toxicity to fish

> 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 (Chron-

Exposure time: 21 d

NOEC: 10 mg/l

ic toxicity)

Species: Daphnia magna (Water flea)

#### 12.2 Persistence and degradability

**Product:** 

Biodegradability Remarks: No data available

Physico-chemical removabil- :

ity

Remarks: No data available

#### **Components:**

Polysulfides, di-tert-dodecyl:

Biodegradability Test Type: Primary biodegradation

Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301F

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

Biodegradability Test Type: Primary biodegradation

Inoculum: activated sludge Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301C



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### N-methyl-N-[C18-(unsaturated)alkanoyl]glycine:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: rapidly biodegradable Biodegradation: 85,2 % Exposure time: 28 d

#### residual oils (petroleum), hydrotreated:

Biodegradability : Result: Not rapidly biodegradable

#### 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), solvent-dewaxed heavy paraffinic:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 31 % Exposure time: 28 d

Method: OECD Test Guideline 301B

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:

#### Polysulfides, di-tert-dodecyl:

Bioaccumulation : Remarks: This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).

This substance is not considered to be very persistent and

very bioaccumulating (vPvB).

Due to the distribution coefficient n-octanol/water, accumula-

tion in organisms is possible.

Partition coefficient: n-

octanol/water

log Pow: > 6,2 (22 °C)



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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)

N-methyl-N-[C18-(unsaturated)alkanoyl]glycine:

Partition coefficient: n-

octanol/water

: log Pow: 3,5 - 4,2

residual oils (petroleum), solvent-dewaxed:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

Pow: > 3,5

12.4 Mobility in soil

**Product:** 

Mobility : Remarks: No data available

Distribution among environ-

mental 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:** 

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)..

12.6 Other adverse effects

**Product:** 

Endocrine disrupting poten-

tial

: 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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Additional ecological infor-

mation

No information on ecology is available.

**Components:** 

Polysulfides, di-tert-dodecyl:

Additional ecological infor-

mation

May cause long lasting harmful effects to aquatic life.

### **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

ADN : Not regulated as a dangerous good
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



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#### 14.2 UN proper shipping name

ADN : Not regulated as a dangerous good
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)

ADN : Not regulated as a dangerous good
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

ADN : Not regulated as a dangerous good
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

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

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

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



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REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

This product does not contain substances of very high concern (Regu-

lation (EC) No 1907/2006 (REACH),

Article 57).

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances.

preparations and articles (Annex XVII)

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.

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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 1 slightly hazardous to water

Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : Total dust:

others: 2,1 %

Inorganic substances in powdered form:

Not applicable

Inorganic substances in vapour or gaseous form:

Not applicable

Organic Substances: portion Class 1: < 0,01 %



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others: 97,9 %

Carcinogenic substances:

Not applicable Mutagenic: Not applicable Toxic to reproduction: Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control)

Not applicable

### 15.2 Chemical safety assessment

This information is not available.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H315 : Causes skin irritation.

H318 : Causes serious eye damage.

H332 : Harmful if inhaled. H400 : Very toxic to aquatic life.

H412 : Harmful to aquatic life with long lasting effects.
H413 : May cause long lasting harmful effects to aquatic life.

#### 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; 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 - Con-



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centration 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:

Classification procedure:

Eye Irrit. 2 H319 Calculation method

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