

# SAFETY DATA SHEET

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



## STRUCTOVIS P LIQUID

Version	Revision Date:	Date of last issue: 29.09.2021	Print Date:
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name : STRUCTOVIS P LIQUID  
Article-No. : 027027

#### 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 number : +49 89 7876 700 (24 hrs)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

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Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
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 : H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.

**Response:**  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P391 Collect spillage.

#### Hazardous components which must be listed on the label:

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

Benzenesulfonic acid, mono-C15-36-branched alkyl derivs., calcium salts

reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl

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derivats

### 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: This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : polyalkylene glycol oil  
lithium soap

#### Components

Chemical name	CAS-No. EC-No.  Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate	947-946-9  01-2120772600-59-XXXX	Skin Irrit.2; H315 Skin Sens.1B; H317 Aquatic Chronic4; H413		>= 1 - < 2,5
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	931-384-6  01-2119493620-38-XXXX	Acute Tox.4; H302 Eye Dam.1; H318 Skin Sens.1; H317 Aquatic Chronic2; H411		>= 1 - < 2,5
N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-	939-700-4	Skin Irrit.2; H315 Skin Sens.1B; H317 Aquatic Acute1;	M-Factor: 1/	>= 0,25 - < 1

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bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)	01-2119982395-25-XXXX	H400 Aquatic Chronic2; H411		
Benzenesulfonic acid, mono-C15-36-branched alkyl derivs., calcium salts	90194-49-3 290-660-8	Skin Sens.1B; H317		>= 0,1 - < 1
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	627-034-4  01-2119473797-19-XXXX	Acute Tox.4; H302 Skin Corr.1B; H314 Eye Dam.1; H318 STOT SE3; H335 STOT RE2; H373 Asp. Tox.1; H304 Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 10/10	>= 0,25 - < 1
reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats	939-460-0  01-2119971727-23-XXXX	Flam. Liq.3; H226 Skin Irrit.2; H315 Eye Dam.1; H318 Skin Sens.1B; H317 Aquatic Chronic3; H412		>= 0,1 - < 0,25

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.

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Keep respiratory tract clear.  
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Take off all contaminated clothing immediately.  
Wash off immediately with soap and plenty of water.  
Get medical attention immediately if irritation develops and persists.  
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 : Allergic appearance  
Risks : May cause an allergic skin reaction.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

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

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### 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 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.  
Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
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.

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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

### 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

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Exposure routes	Potential health effects	Value
bis(4-(1,1,3,3-tetramethyl-butyl)phenyl)amine	Workers	Inhalation	Long-term systemic effects	4,11 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	1,17 mg/kg bw/day
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate	Workers	Inhalation	Long-term systemic effects	4,93 mg/m <sup>3</sup>
	Workers	Dermal	Long-term systemic effects	1,4 mg/kg bw/day
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	Workers	Inhalation	Long-term systemic effects	8,56 mg/m <sup>3</sup>

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	Workers	Skin contact	Long-term systemic effects	12,5 mg/kg
N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)	Industrial use	Inhalation	Long-term systemic effects	1,3 mg/m3
	Industrial use	Skin contact	Long-term systemic effects	0,4 mg/kg
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	Workers	Inhalation	Long-term systemic effects	0,38 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,09 mg/kg
	Workers	Skin contact	Long-term local effects	60 mg/kg
	Consumers	Ingestion	Long-term systemic effects	0,040 mg/kg
reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivats	Workers	Inhalation	Long-term systemic effects	2,35 mg/m3
	Workers	Skin contact	Long-term systemic effects	66,7 mg/m3

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

Substance name	Environmental Compartment	Value
bis(4-(1,1,3,3-tetramethylbutyl)phenyl)amine	Fresh water	0,00002 µg/l
	Marine water	0,000002 µg/l
	Fresh water sediment	0,00467 mg/kg
	Marine sediment	0,000467 mg/kg
	Soil	0,000934 mg/kg



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Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	Fresh water	0,0012 mg/l
	Marine water	0,00012 mg/l
	Intermittent use/release	0,085 mg/l
	Sewage treatment plant	24,33 mg/l
	Fresh water sediment	14,4 mg/kg
	Marine sediment	1,44 mg/kg
	Soil	2,94 mg/kg
N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)	Fresh water	0,000976 mg/l
	Marine water	0,000098 mg/l
	Intermittent use/release	0,00976 mg/l
	Soil	0,00184 - 0,842 mg/kg
	Fresh water sediment	0,0121 - 4,23 mg/kg
	Marine sediment	0,00121 - 0,423 mg/kg
	Microbiological Activity in Sewage Treatment Systems	0,69 mg/l
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	Fresh water	0,00026 mg/l
	Marine water	0,000026 mg/l
	Intermittent use/release	0,00016 mg/l
	Microbiological Activity in Sewage Treatment Systems	0,55 mg/l
	Fresh water sediment	0,1794 mg/kg
	Marine sediment	0,01794 mg/kg
	Soil	10 mg/kg
	Oral	0,22 mg/kg
reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivats	Fresh water	0,026 mg/l
	Marine water	0,0026 mg/l

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	Intermittent use/release	0,26 mg/l
	Sewage treatment plant	45,5 mg/l
	Fresh water sediment	1108,6 mg/kg
	Marine sediment	110,86 mg/kg
	Soil	221,48 mg/kg
	Oral	6,7 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 : 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 : green  
Odour : characteristic  
Odour Threshold : No data available

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Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flammability (solid, gas)	:	Combustible Solids
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	Not applicable substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	Not applicable
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	:	1,000 (20 °C) Reference substance: Water The value is calculated
Density	:	1,00 g/cm <sup>3</sup> (20 °C)
Bulk density	:	No data available
Relative vapour density	:	No data available

### 9.2 Other information

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Explosives	:	Not explosive
Oxidizing properties	:	No data available
Self-ignition	:	No data available
Evaporation rate	:	No data available
Sublimation point	:	No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No hazards to be specially mentioned.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

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

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### Components:

#### **Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithio-phosphate:**

Acute dermal toxicity : Symptoms: Redness, Local irritation

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Acute oral toxicity : LD50 (Rat): 2.000 mg/kg  
Assessment: The component/mixture is moderately toxic after single ingestion.

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Acute oral toxicity : LD50 (Rat): 3.313 mg/kg  
Method: OECD Test Guideline 401

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

#### **(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:**

Acute oral toxicity : LD50 (Rat): 1.689 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

#### **reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:**

Acute oral toxicity : LD50 (Rat): > 2.000 - < 5.000 mg/kg  
Assessment: The component/mixture is minimally toxic after single ingestion.

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

### **Skin corrosion/irritation**

### Product:

Remarks : This information is not available.

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### Components:

#### **Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithio-phosphate:**

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

Remarks : Irritating to skin.

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:  
Result : Mild skin irritation

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:  
Species : Rabbit  
Assessment : Irritating to skin.  
Method : Draize Test  
Result : Irritating to skin.

#### **(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:**

Species : Rabbit  
Assessment : Causes burns.  
Method : OECD Test Guideline 404  
Result : Causes burns.  
GLP : yes

#### **reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:**

Species : Rabbit  
Result : Severe skin irritation

### **Serious eye damage/eye irritation**

#### Product:

Remarks : Irritating to eyes.

### Components:

#### **Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithio-phosphate:**

Assessment : No eye irritation  
Result : No eye irritation

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Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

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

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	Draize Test
Result	:	No eye irritation

**(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:**

Assessment	:	Corrosive
Result	:	Corrosive

**reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:**

Species	:	Rabbit
Result	:	Irreversible effects on the eye

### Respiratory or skin sensitisation

#### Product:

Remarks	:	This information is not available.
---------	---	------------------------------------

#### Components:

**Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:**

Assessment	:	The product is a skin sensitiser, sub-category 1B.
Result	:	The product is a skin sensitiser, sub-category 1B.

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Assessment	:	Probability or evidence of skin sensitisation in humans
Result	:	May cause sensitisation by skin contact.

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:

Test Type	: Maximisation Test
Species	: Guinea pig
Assessment	: The product is a skin sensitiser, sub-category 1B.
Method	: OECD Test Guideline 406
Result	: The product is a skin sensitiser, sub-category 1B.

### **Benzenesulfonic acid, mono-C15-36-branched alkyl derivs., calcium salts:**

Assessment	: The product is a skin sensitiser, sub-category 1B.
Result	: The product is a skin sensitiser, sub-category 1B.

### **(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:**

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

### **reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:**

Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: Probability or evidence of low to moderate skin sensitisation rate in humans

### **Germ cell mutagenicity**

#### **Product:**

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

#### **Components:**

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Genotoxicity in vitro	: Test Type: Ames test Test system: Salmonella typhimurium Method: OECD Test Guideline 471 Result: negative
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:

Genotoxicity in vitro : Test Type: Ames test  
Method: OECD Test Guideline 471  
Result: negative

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

### reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:

Genotoxicity in vitro : Test Type: Ames test  
Test system: Escherichia coli  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

Test Type: Ames test  
Test system: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

Test Type: In vitro mammalian cell gene mutation test  
Test system: Human lymphocytes  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: negative

### Carcinogenicity

#### Product:

Remarks : No data available

#### Components:

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

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### Reproductive toxicity

#### Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

#### Components:

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

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

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Effects on fertility : Species: Rat  
Application Route: Oral  
General Toxicity - Parent: NOAEL: 45 mg/kg body weight  
General Toxicity F1: NOAEL: 45 mg/kg body weight  
Fertility: NOAEL: 150 mg/kg body weight  
Method: OECD Test Guideline 422

Effects on foetal development : Species: Rat  
Application Route: Oral  
Duration of Single Treatment: 28 h  
General Toxicity Maternal: NOAEL: 45 mg/kg body weight  
Developmental Toxicity: NOAEL: 45 mg/kg body weight  
Method: OECD Test Guideline 422

Reproductive toxicity - Assessment : - Fertility -  
No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.  
- Teratogenicity -  
No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

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**reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:**

### STOT - single exposure

#### Components:

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

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

### **(Z)-octadec-9-enylamine, C16-18(even numbered, saturated and unsaturated)-alkylamines:**

Exposure routes : Inhalation  
Target Organs : Respiratory Tract  
Assessment : May cause respiratory irritation.

### STOT - repeated exposure

#### Components:

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

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

### **(Z)-octadec-9-enylamine, C16-18(even numbered, saturated and unsaturated)-alkylamines:**

Exposure routes : Ingestion  
Target Organs : Gastrointestinal tract, Liver, Immune system  
Assessment : May cause damage to organs through prolonged or repeated exposure.

### Repeated dose toxicity

#### Product:

Remarks : This information is not available.

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### Components:

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Species	:	Rat
NOAEL	:	45 mg/kg
Application Route	:	Oral
Exposure time	:	28
Method	:	OECD Test Guideline 422

### Aspiration toxicity

#### Product:

This information is not available.

### Components:

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

No aspiration toxicity classification

### (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

May be fatal if swallowed and enters airways.

## 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.
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### Further information

#### Product:

Remarks	:	Information given is based on data on the components and the toxicology of similar products.
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### Components:

**Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithio-phosphate:**

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

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish : 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

#### Components:

**Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithio-phosphate:**

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

Remarks: May cause long-term adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: yes

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

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Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 8,5 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 91,4 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 6,4 mg/l  
Exposure time: 96 h

Toxicity to microorganisms : EC50 (activated sludge): 2.433 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 0,12 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

### Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

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

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 1,3 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)): 2,05 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 0,762 mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201

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M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC20 (activated sludge): 15 mg/l  
Exposure time: 3 h  
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209

### Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

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

### (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0,11 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,011 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (algae): > 0,1 mg/l  
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (activated sludge): 15,5 mg/l  
Exposure time: 3 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,013 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity) : 10

### reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 26 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 75 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 25 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): 4.550 mg/l

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Exposure time: 3 h  
Method: OECD Test Guideline 209

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

#### Components:

##### **Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:**

Biodegradability : Result: Not rapidly biodegradable  
Biodegradation: 11 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Biodegradability : Test Type: aerobic  
Inoculum: activated sludge  
Result: Not rapidly biodegradable  
Biodegradation: 5,4 - 9,4 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B  
GLP: yes

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Biodegradability : Test Type: Primary biodegradation  
Inoculum: activated sludge  
Result: Not rapidly biodegradable  
Biodegradation: < 10 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

##### **(Z)-octadec-9-enylamine, C16-18(even numbered, saturated and unsaturated)-alkylamines:**

Biodegradability : Test Type: aerobic  
Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 28 d



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Method: OECD Test Guideline 301D

### reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 17,4 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

### 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:

#### Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithio-phosphate:

Partition coefficient: n- : log Pow: > 4  
octanol/water

Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)

:

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)  
Exposure time: 97 d  
Bioconcentration factor (BCF): 436  
Method: OPPTS 850.1730

N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine, N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-, 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-, 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl-(Mixture)

:

Bioaccumulation : Bioconcentration factor (BCF): 1.676

Partition coefficient: n- : Remarks: Not applicable  
octanol/water

#### (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Bioaccumulation : Bioconcentration factor (BCF): > 500

Partition coefficient: n- : log Pow: > 4  
octanol/water

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**reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:**

Partition coefficient: n-octanol/water : log Pow: > 9,4  
Method: OECD Test Guideline 117

### 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:

**(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:**

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

### 12.6 Endocrine disrupting properties

#### Product:

Assessment : This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

#### Components:

**reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formadehyde and phenol, heptyl derivats:**

Assessment : The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

### 12.7 Other adverse effects

#### Product:

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

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### Components:

**Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithio-phosphate:**

Additional ecological information : 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 or ID number

ADN	: UN 3077
ADR	: UN 3077
RID	: UN 3077
IMDG	: UN 3077
IATA	: UN 3077

### 14.2 UN proper shipping name

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<b>ADN</b>	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((Z)-octadec-9-enylamine)
<b>ADR</b>	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((Z)-octadec-9-enylamine)
<b>RID</b>	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((Z)-octadec-9-enylamine)
<b>IMDG</b>	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((Z)-octadec-9-enylamine)
<b>IATA</b>	:	Environmentally hazardous substance, solid, n.o.s. ((Z)-octadec-9-enylamine)

### 14.3 Transport hazard class(es)

<b>ADN</b>	:	9
<b>ADR</b>	:	9
<b>RID</b>	:	9
<b>IMDG</b>	:	9
<b>IATA</b>	:	9

### 14.4 Packing group

<b>ADN</b>	
Packing group	: III
Classification Code	: M7
Hazard Identification Number	: 90
Labels	: 9
<b>ADR</b>	
Packing group	: III
Classification Code	: M7
Hazard Identification Number	: 90
Labels	: 9
Tunnel restriction code	: (-)
<b>RID</b>	
Packing group	: III
Classification Code	: M7
Hazard Identification Number	: 90
Labels	: 9
<b>IMDG</b>	
Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
<b>IATA (Cargo)</b>	
Packing instruction (cargo aircraft)	: 956

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Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous Dangerous Goods

### IATA (Passenger)

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

## 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, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). (EU SVHC) : reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivats

REACH - List of substances subject to authorisation (Annex XIV) (EU. REACH-Annex XIV) : Not applicable

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Regulation (EC) No 1005/2009 on substances that deplete the ozone layer (EC 1005/2009) : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) (EU POP) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals (EU PIC) : 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

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

TA Luft List (Germany) : Total dust:  
others: 7,75 %

Inorganic substances in powdered form:  
Not applicable  
Inorganic substances in vapour or gaseous form:  
Not applicable  
Organic Substances:  
portion Class 1: 0,47 %  
others: 91,79 %

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)  
Volatile organic compounds (VOC) content: 0,09 %

### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

### 15.2 Chemical safety assessment

This information is not available.

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### SECTION 16: Other information

#### Full text of H-Statements

H226	: Flammable liquid and vapour.
H302	: Harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H314	: Causes severe skin burns and eye damage.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H335	: May cause respiratory irritation.
H373	: May cause damage to organs through prolonged or repeated exposure.
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.
H413	: May cause long lasting harmful effects to aquatic life.

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office

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of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

Eye Irrit. 2	H319
Skin Sens. 1	H317
Aquatic Chronic 2	H411

#### Classification procedure:

Calculation method
Calculation method
Calculation method

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