

SAFETY DATA SHEET

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



Klüberplus S 01-004

Version	Revision Date:	Date of last issue: 09.04.2020	Print Date:
6.1	08.02.2021	Date of first issue: 19.04.2016	08.02.2021

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

1.1 Product identifier

Product name : Klüberplus S 01-004

Article-No. : 042155

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

Use of the Sub-
stance/Mixture : Lubricant

Recommended restrictions
on use : For professional users only.

1.3 Details of the supplier of the safety data sheet

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

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

National contact : Klüber Lubrication Deutschland
Geisenhausenerstraße 7
81379 München
Deutschland
Tel.: +49 89 7876 0
Fax: +49 89 7876 565
customer.service.de@klueber.com
www.klueber.com

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1

H317: May cause an allergic skin reaction.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements :

Prevention:

P261

Avoid breathing vapours.

P272

Contaminated work clothing should not be allowed out of the workplace.

P280

Wear protective gloves.

Response:

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P333 + P313

If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

Hazardous components which must be listed on the label:

octhilinone (ISO)

1,2-benzisothiazol-3(2H)-one

2-methylisothiazol-3(2H)-one

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 : water
graphite

Components

Chemical name	CAS-No. EC-No.	Classification	Concentration limits	Concentration (% w/w)
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	Index-No. Registration number		M-Factor Notes	
N-methyl-N-[C18-(unsaturated)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/	$\geq 0,25 - < 1$
octhilinone (ISO)	26530-20-1 247-761-7 613-112-00-5	Acute Tox.4; H302 Acute Tox.3; H331 Acute Tox.3; H311 Skin Corr.1B; H314 Eye Dam.1; H318 Skin Sens.1; H317 Aquatic Acute1; H400 Aquatic Chronic1; H410	$\geq 0,05$ % Skin Sens.1, H317 M-Factor: 10/1	$\geq 0,0025 - < 0,025$
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox.4; H302 Acute Tox.2; H330 Skin Irrit.2; H315 Eye Dam.1; H318 Skin Sens.1; H317 Aquatic Acute1; H400 Aquatic Chronic2; H411	$\geq 0,05$ % Skin Sens.1, H317 M-Factor: 1/	$\geq 0,0025 - < 0,025$
2-methylisothiazol-3(2H)-one	2682-20-4 220-239-6 613-326-00-9 01-2120764690-50-XXXX	Acute Tox.3; H301 Acute Tox.2; H330 Acute Tox.3; H311 Skin Corr.1B; H314 Eye Dam.1; H318 Skin Sens.1A; H317 Aquatic Acute1; H400 Aquatic Chronic1; H410	$\geq 0,0015$ % Skin Sens.1A, H317 M-Factor: 10/1	$\geq 0,0025 - < 0,025$
Substances with a workplace exposure limit :				
Graphite	7782-42-5 231-955-3 01-2119486977-12-XXXX	Not classified		$\geq 20 - < 30$

For explanation of abbreviations see section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

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

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5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides

5.3 Advice for firefighters

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

Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Use personal protective equipment.
Ensure adequate ventilation.
Do not breathe vapours or spray mist.
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.
Prevent further leakage or spillage if safe to do so.
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 : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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 : Do not breathe vapours or spray mist.
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

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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.
Do not ingest.
Do not repack.
Do not re-use empty containers.
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.

Protect from frost.

Storage class (TRGS 510) : 12, Non Combustible Liquids

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
Graphite	7782-42-5	AGW (Inhalable fraction)	10 mg/m ³	DE TRGS 900 (2014-04-02)
Peak-limit: excursion factor (category)	2;(II)			
		AGW (Alveolate fraction)	1,25 mg/m ³	DE TRGS 900 (2014-04-02)

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Peak-limit: excursion factor (category)	2;(II)			
N-methyl-N-[C18-(unsaturated)alkanoyl]glycine	Not Assigned	AGW (Inhalable fraction)	0,05 mg/m ³	DE TRGS 900 (2019-03-29)
Peak-limit: excursion factor (category)	2;(II)			
octhilonone (ISO)	26530-20-1	AGW (Inhalable fraction)	0,05 mg/m ³	DE TRGS 900 (2006-01-01)
Peak-limit: excursion factor (category)	2;(I)			
Further information	Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Graphite	Workers	Inhalation	Long-term systemic effects	1,2 mg/m ³
N-methyl-N-[C18-(unsaturated)alkanoyl]glycine	Workers	Inhalation	Long-term systemic effects	0,8 mg/m ³
	Workers	Skin contact	Long-term systemic effects	20 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
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	0,007 mg/kg
	Marine sediment	0,001 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

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- | | |
|------------------------|--|
| 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 | : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. |
| Filter type | : Filter type A-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

- | | |
|--|---------------------------------------|
| Appearance | : liquid |
| Colour | : black |
| Odour | : odourless |
| Odour Threshold | : No data available |
| pH | : 7,7 (20 °C)
Concentration: 100 % |
| Melting point/range | : No data available |
| Boiling point/boiling range | : > 100 °C |
| Flash point | : does not flash |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Upper explosion limit / Upper flammability limit | : No data available |

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Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	< 0,001 hPa (20 °C)
Relative vapour density	:	No data available
Relative density	:	1,12 (20 °C) Reference substance: Water The value is calculated
Density	:	1,12 g/cm ³ (20 °C)
Bulk density	:	No data available
Solubility(ies)		
Water solubility	:	completely soluble
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	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	No data available

9.2 Other information

Flammability (liquids)	:	Will not burn
Sublimation point	:	No data available
Self-ignition	:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

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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 toxicological effects

Acute toxicity

Product:

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

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

Acute dermal toxicity : Symptoms: Redness, Local irritation

Components:

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

octhilinone (ISO):

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): 690 mg/kg

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1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat): 1.193 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat): 0,4 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): 4.115 mg/kg

2-methylisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat): 120 mg/kg
Method: OPPTS 870.1100
GLP: yes

Acute inhalation toxicity : LC50 (Rat): 0,11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rat): 242 mg/kg
Method: OECD Test Guideline 402

Graphite:

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

Acute inhalation toxicity : LC50 (Rat): > 2.000 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Skin corrosion/irritation

Product:

Remarks : This information is not available.

Components:

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

Species : Rabbit
Assessment : Irritating to skin.
Result : Irritating to skin.

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octhilinone (ISO):

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

1,2-benzisothiazol-3(2H)-one:

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

2-methylisothiazol-3(2H)-one:

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

Graphite:

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

Serious eye damage/eye irritation

Product:

Remarks	:	This information is not available.
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Components:

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

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

octhilinone (ISO):

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

1,2-benzisothiazol-3(2H)-one:

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

2-methylisothiazol-3(2H)-one:

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

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Graphite:

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

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

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.

octhilinone (ISO):

Assessment	:	May cause sensitisation by skin contact.
Result	:	May cause sensitisation by skin contact.

1,2-benzisothiazol-3(2H)-one:

Assessment	:	May cause sensitisation by skin contact.
Result	:	May cause sensitisation by skin contact.

2-methylisothiazol-3(2H)-one:

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

Graphite:

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

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

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Components:

2-methylisothiazol-3(2H)-one:

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

Graphite:

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

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

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

Carcinogenicity

Product:

Remarks : No data available

Components:

2-methylisothiazol-3(2H)-one:

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

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Components:

2-methylisothiazol-3(2H)-one:

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

Graphite:

Effects on fertility : Species: Rat
Application Route: Oral

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General Toxicity F1: NOAEL: 813 mg/kg body weight
Method: OECD Test Guideline 422

STOT - single exposure

Components:

2-methylisothiazol-3(2H)-one:

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

STOT - repeated exposure

Components:

2-methylisothiazol-3(2H)-one:

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:

Graphite:

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

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

Aspiration toxicity

Product:

This information is not available.

Components:

2-methylisothiazol-3(2H)-one:

No aspiration toxicity classification

Further information

Product:

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

Components:

2-methylisothiazol-3(2H)-one:

Remarks : Ingestion causes burns of the upper digestive and respiratory tracts.

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:

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
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 toxicity) : 1

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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.

octhlinone (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,036 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,42 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 0,084 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC20 (activated sludge): 7,3 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Toxicity to fish (Chronic toxicity) : NOEC: 0,022 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,002 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: Reproduction Test
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3 mg/l
Exposure time: 48 h
Test Type: Immobilization

M-Factor (Acute aquatic toxicity) : 1

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Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

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

2-methylisothiazol-3(2H)-one:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,93 mg/l
Exposure time: 48 h
Test Type: flow-through test
Method: OECD Test Guideline 202
GLP: yes

M-Factor (Acute aquatic toxicity) : 10

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,044 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: flow-through test
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

Graphite:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

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

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

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

Components:

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

Biodegradability : Test Type: aerobic

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

octhilinone (ISO):

Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: > 83 %
Exposure time: 28 d
Method: OECD Test Guideline 303

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: rapidly biodegradable
Biodegradation: > 90 %
Method: OECD Test Guideline 303

Graphite:

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

12.3 Bioaccumulative potential

Product:

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

Components:

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

Partition coefficient: n-octanol/water : log Pow: 3,5 - 4,2

octhilinone (ISO):

Partition coefficient: n-octanol/water : log Pow: 2,61

1,2-benzisothiazol-3(2H)-one:

Partition coefficient: n-octanol/water : log Pow: 0,7

2-methylisothiazol-3(2H)-one:

Partition coefficient: n-octanol/water : log Pow: -0,486 (25 °C)

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octanol/water

pH: 7

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:

1,2-benzisothiazol-3(2H)-one:

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

12.6 Other adverse effects

Product:

Additional ecological information : No information on ecology is available.

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:

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Waste Code : unused product
12 01 09*, machining emulsions and solutions free of halo-
gens

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

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

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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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: This product does not contain substances of very high concern (Regulation (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 deplete the ozone layer	: Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: Conditions of restriction for the following entries should be considered: Number on list 3
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	Not applicable
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: 20 %

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Inorganic substances in powdered form:

Not applicable

Inorganic substances in vapour or gaseous form:

Not applicable

Organic Substances:

portion Class 1: 0,02 %

others: 1,75 %

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

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.

SECTION 16: Other information

Full text of H-Statements

H301	: Toxic if swallowed.
H302	: Harmful if swallowed.
H311	: Toxic in contact with skin.
H314	: Causes severe skin burns and eye damage.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H330	: Fatal if inhaled.
H331	: Toxic if inhaled.
H332	: Harmful if inhaled.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H411	: Toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

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

Further information

Classification of the mixture:

Skin Sens. 1

H317

Classification procedure:

Calculation method

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