

Klübersynth UH1 14-151

Version 1.2

Revision Date 23.08.2017

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1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Klübersynth UH1 14-151

Article-No. : 096037

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

Use of the Substance/Mixture : Grease

Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

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

E-mail address : mcm@klueber.com
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Deutschland
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81379 München
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Tel.: +49 89 7876 0
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1.4 Emergency telephone number

+49 89 7876 700 (24 hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3

H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

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Labelling (REGULATION (EC) No 1272/2008)

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil
aluminium complex soap

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
2,6-di-tert-butyl-p-cresol	128-37-0 204-881-4 / 01-2119555270-46-XXXX	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0,25 - < 1
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	110-25-8 203-749-3 / 01-2119488991-20-XXXX	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400	>= 0,25 - < 1
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	95-38-5 202-414-9	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0,25 - < 1
Substances with a workplace exposure limit :			
White mineral oil (petroleum)	8042-47-5 232-455-8 / 01-2119487078-27-XXXX		>= 1 - < 10
White mineral oil (petroleum)	8042-47-5 232-455-8 / 01-2119487078-27-XXXX	Asp. Tox. 1; H304	>= 1 - < 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

If inhaled : Remove person to fresh air. If signs/symptoms continue, get

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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 : Remove contaminated clothing. If irritation develops, get medical attention.
In case of contact, immediately flush skin with plenty of water.
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 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.

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

- Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Metal oxides
Nitrogen oxides (NOx)
Oxides of phosphorus

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

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In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
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.

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).
Avoid breathing dust.
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 materials 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.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Do not 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.

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.

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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.

German storage class : 11 Combustible Solids

7.3 Specific end use(s)

: Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type	Control parameters	Update	Basis
White mineral oil (petroleum)	8042-47-5	AGW	5 mg/m ³	2015-11-06	DE TRGS 900
Further information:	DFG: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
White mineral oil (petroleum)	8042-47-5	AGW	5 mg/m ³	2015-11-06	DE TRGS 900
Further information:	DFG: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
2,6-di-tert-butyl-p-cresol	128-37-0	AGW	10 mg/m ³	2012-09-13	DE TRGS 900
Further information:	DFG: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). Sum of vapor and aerosols. When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

DNEL

2,6-di-tert-butyl-p-cresol : End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 3,5 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 0,5 mg/kg

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine : End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects

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Value: 0,2 mg/m³

End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Acute systemic effects
Value: 18 mg/m³

End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 0,01 mg/m³

End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 18 mg/m³

End Use: Industrial use
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 10 mg/kg

End Use: Industrial use
Exposure routes: Skin contact
Potential health effects: Acute systemic effects
Value: 100 mg/kg

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

: End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term exposure, Systemic effects
Value: 0,6 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term exposure, Systemic effects
Value: 0,46 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Short-term exposure, Systemic effects
Value: 2 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Short-term exposure, Systemic effects
Value: 14 mg/m³

PNEC
2,6-di-tert-butyl-p-cresol

: Fresh water
Value: 0,199 µg/l

Marine water
Value: 0,0199 µg/l

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	Intermittent use/release Value: 1,99 µg/l
	Microbiological Activity in Sewage Treatment Systems Value: 0,17 mg/l
	Fresh water sediment Value: 0,0996 mg/kg
	Marine sediment Value: 0,00996 mg/kg
	Soil Value: 0,04769 mg/kg
	Oral Value: 8,33 mg/kg
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	: Fresh water Value: 0,00043 mg/l
	Marine water Value: 0,000043 mg/l
	Intermittent use/release Value: 0,0043 mg/l
	Microbiological Activity in Sewage Treatment Systems Value: 13 mg/l
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	: Fresh water Value: 0,00003 mg/l
	Marine water Value: 0,000003 mg/l
	Fresh water sediment Value: 0,376 mg/kg
	Marine sediment Value: 0,0376 mg/kg
	Soil Value: 0,075 mg/kg

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection : Not required; except in case of aerosol formation.
Filter type P

Hand protection : For prolonged or repeated contact use protective gloves.

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The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
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.
In case of contact through splashing:

: Nitrile rubber
Protective index Class 1

Eye protection : Tightly fitting safety goggles

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

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.

Environmental exposure controls

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

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : paste

Colour : beige

Odour : characteristic

Odour Threshold : No data available

pH : No data available

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

Lower explosion limit : No data available

Upper explosion limit : No data available

Vapour pressure : < 0,001 hPa, 20 °C

Relative vapour density : No data available

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Density	: 0,89 g/cm ³ , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: No data available

9.2 Other information

Sublimation point	: No data available
Bulk density	: No data available

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

Hazardous decomposition products : No decomposition if stored and applied as directed.

11. Toxicological information

11.1 Information on toxicological effects

Product

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

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Acute dermal toxicity	: This information is not available.
Skin corrosion/irritation	: This information is not available.
Serious eye damage/eye irritation	: This information is not available.
Respiratory or skin sensitisation	: This information is not available.
Germ cell mutagenicity	
Genotoxicity in vitro	: No data available
Genotoxicity in vivo	: No data available
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
Teratogenicity	: No data available
Repeated dose toxicity	: This information is not available.
Aspiration toxicity	: This information is not available.
Further information	: Information given is based on data on the components and the toxicology of similar products.

Components:

2,6-di-tert-butyl-p-cresol :

Acute oral toxicity	: LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 401
Acute dermal toxicity	: LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 402
Skin corrosion/irritation	: Rabbit, Result: No skin irritation, Classification: No skin irritation
Serious eye damage/eye irritation	: Rabbit, Result: No eye irritation, Classification: No eye irritation
Respiratory or skin sensitisation	: Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation.
Germ cell mutagenicity	
Genotoxicity in vitro	: Ames test, Result: negative, In vitro tests did not show mutagenic effects
Genotoxicity in vivo	: In vivo micronucleus test, Result: negative
Assessment	: In vivo tests did not show mutagenic effects
Reproductive toxicity	: Rat, NOAEL: 100 mg/kg Assessment: No toxicity to reproduction
STOT - single exposure	: Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	: Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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Aspiration toxicity : No aspiration toxicity classification

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Acute oral toxicity : LD50: 9.200 mg/kg, Rat

Acute inhalation toxicity : LC50: 1,37 mg/l, 4 h, Rat, dust/mist

Skin corrosion/irritation : Rabbit, Result: Irritating to skin., Classification: Irritating to skin., OECD Test Guideline 404

Serious eye damage/eye irritation : Rabbit, Result: Risk of serious damage to eyes., Classification: Risk of serious damage to eyes., OECD Test Guideline 405

Respiratory or skin sensitisation : Maximisation Test, Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406

Germ cell mutagenicity

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

Aspiration toxicity : No aspiration toxicity classification

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

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

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

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

Serious eye damage/eye irritation : Rabbit, Result: Corrosive, Classification: Corrosive, OECD Test Guideline 405

Respiratory or skin sensitisation : Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406

Germ cell mutagenicity

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

Repeated dose toxicity : Rat, Oral, 100 mg/kg, NOAEL: 20 mg/kg

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

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White mineral oil (petroleum) :

- Acute oral toxicity : LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 401
- Acute inhalation toxicity : LC50: > 5 mg/l, 4 h, Rat, dust/mist, OECD Test Guideline 403, GLP: yes, The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 Dermal: > 2.000 mg/kg, Rabbit, OECD Test Guideline 402, GLP: yes, The substance or mixture has no acute dermal toxicity
- Skin corrosion/irritation : Rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404, GLP: yes
- Serious eye damage/eye irritation : Rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405, GLP: yes
- Respiratory or skin sensitisation : Maximisation Test, Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406, GLP: yes
- Germ cell mutagenicity
- Genotoxicity in vitro : Ames test, Result: negative, Mutagenicity (Salmonella typhimurium - reverse mutation assay), GLP: yes
- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- STOT - single exposure : Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
- Repeated dose toxicity : 90 d, NOAEL: 1.800 mg/kg
- STOT - repeated exposure : Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
- Aspiration toxicity : No aspiration toxicity classification

White mineral oil (petroleum) :

- Acute oral toxicity : LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 401
- Acute inhalation toxicity : LC50: > 5 mg/l, 4 h, Rat, dust/mist, OECD Test Guideline 403, The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50: > 2.000 mg/kg, Rabbit, OECD Test Guideline 402, The substance or mixture has no acute dermal toxicity
- Skin corrosion/irritation : Rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404
- Serious eye damage/eye irritation : Rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405
- Respiratory or skin sensitisation : Buehler Test, Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406
- Germ cell mutagenicity

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Assessment	: Animal testing did not show any mutagenic effects.
Reproductive toxicity	: Rat(male and female), Dermal, NOAEL: > 2.000 mg/kg, F1: > 2.000 mg/kg, OECD Test Guideline 415 Assessment: No toxicity to reproduction
Teratogenicity	: Rat, Oral, NOAEL: 4.200 mg/kg Assessment: Did not show teratogenic effects in animal experiments.
STOT - single exposure	: Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	: Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	: May be fatal if swallowed and enters airways.

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish	: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxicity to daphnia and other aquatic invertebrates	: No data available
Toxicity to algae	: No data available
Toxicity to bacteria	: No data available

Components:

2,6-di-tert-butyl-p-cresol :

Toxicity to fish	: LC50: > 0,57 mg/l, 96 h, Danio rerio (zebra fish), OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50: > 0,17 mg/l, 48 h, Daphnia magna (Water flea)
Toxicity to algae	: EC50: > 0,42 mg/l, 72 h, Desmodesmus subspicatus (green algae)
M-Factor	: 1
Toxicity to daphnia and other aquatic invertebrates	: NOEC: > 0,39 mg/l, 21 d, Daphnia magna (Water flea)

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(Chronic toxicity)

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

- Toxicity to fish : LC50: 3,2 - 4,6 mg/l, 96 h, *Leuciscus idus* (Golden orfe), static test, DIN 38412
- Toxicity to daphnia and other aquatic invertebrates : EC50: 0,53 mg/l, 48 h, *Daphnia magna* (Water flea), static test, Directive 67/548/EEC, Annex V, C.2.
- Toxicity to algae : EC50: 5,1 mg/l, 72 h, *Desmodesmus subspicatus* (green algae), Growth inhibition, Directive 67/548/EEC, Annex V, C.3.
- M-Factor : 1
- Toxicity to bacteria : EC50: 1.300 mg/l, 3 h, Bacteria, Respiration inhibition, OECD 209, GLP: yes

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

- Toxicity to fish : LC50: 0,3 mg/l, 96 h, *Danio rerio* (zebra fish), static test, OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50: 0,136 mg/l, 48 h, *Daphnia magna* (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes
- Toxicity to algae : ErC50: 0,03 mg/l, 72 h, *Desmodesmus subspicatus* (green algae), Growth inhibition, OECD Test Guideline 201
- M-Factor : 10
- Toxicity to bacteria : EC50: 26 mg/l, 3 h, activated sludge, Respiration inhibition, OECD 209

White mineral oil (petroleum) :

- Toxicity to fish : LC50: > 100 mg/l, 96 h, *Oncorhynchus mykiss* (rainbow trout), static test, OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h, *Daphnia* (water flea), Immobilization, OECD Test Guideline 202
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: \geq 1.000 mg/l, 21 d, *Daphnia magna* (Water flea)

White mineral oil (petroleum) :

- Toxicity to fish : LC50: > 100 mg/l, 96 h, *Oncorhynchus mykiss* (rainbow trout), semi-static test, OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : LC50: > 100 mg/l, 48 h, *Daphnia magna* (Water flea), OECD Test Guideline 202
- Toxicity to algae : NOEC: > 100 mg/l, 72 h, *Pseudokirchneriella subcapitata* (green algae), OECD Test Guideline 201
- Toxicity to bacteria : LC50: > 1.000 mg/l, 40 h, Bacteria, Growth inhibition

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Toxicity to fish (Chronic toxicity)	: NOEC: > 100 mg/l, 28 d, Oncorhynchus mykiss (rainbow trout), The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (Cesar models), etc.
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: >= 1.000 mg/l, 21 d, Daphnia magna (Water flea), The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (Cesar models), etc.

12.2 Persistence and degradability

Product:

Biodegradability	: No data available
Physico-chemical removability	: No data available

Components:

2,6-di-tert-butyl-p-cresol :

Biodegradability	: aerobic, 4,5 %, Result: Not rapidly biodegradable, Exposure time: 28 d, activated sludge, OECD Test Guideline 301C
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(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Biodegradability	: aerobic, 85 %, Result: rapidly biodegradable, Exposure time: 28 d, activated sludge, OECD 301 B
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2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol :

Biodegradability	: Primary biodegradation, Result: Not rapidly biodegradable, OECD 301 B
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White mineral oil (petroleum) :

Biodegradability	: Primary biodegradation, 31 %, Result: Not rapidly biodegradable, Exposure time: 28 d, activated sludge, OECD Test Guideline 301B
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12.3 Bioaccumulative potential

Product:

Bioaccumulation	: 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).
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Components:

2,6-di-tert-butyl-p-cresol :

Bioaccumulation	: Bioconcentration factor (BCF): 598,4
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(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Bioaccumulation	: Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.
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2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol :

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

12.4 Mobility in soil

Product:

Mobility : No data available
Distribution among environmental compartments : 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:

2,6-di-tert-butyl-p-cresol :

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

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine :

Assessment : 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).

White mineral oil (petroleum) :

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

White mineral oil (petroleum) :

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

12.6 Other adverse effects

Product:

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

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
: Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

14. Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

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Not dangerous goods
IATA
Not dangerous goods

14.2 Proper shipping name

ADR
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

14.3 Transport hazard class

ADR
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

14.4 Packing group

ADR
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

14.5 Environmental hazards

ADR
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

14.6 Special precautions for user

No special precautions required.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable for product as supplied.

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).

Major Accident Hazard Legislation : 2012/18/EU Update: Not applicable

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- : 96/82/EC Update:
Dangerous for the environment
9b
Quantity 1: 200 t
Quantity 2: 500 t
- Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) : Volatile organic compounds (VOC) content: 0,5 %
VOC content excluding water
- Water contaminating class (Germany) : WGK 2: water endangering
- TA Luft List (Germany) : Total dust: Portion other substances: 13,35 %
Inorganic substances in powdered form: Not applicable
Inorganic substances in vapour or gaseous form: Not applicable
Organic Substances: portion Class 1: 1,6 % ; Portion other substances: 85,05 %
Carcinogenic substances: Not applicable
Mutagenic: Not applicable
Toxic to reproduction: Not applicable

15.2 Chemical safety assessment

This information is not available.

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

- | | |
|------|---------------------------------------------------------------------------------|
| 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. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Further information

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