

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



MANUDISH EXTRALEMOM

WM 0713154

Order number: 0713154

Version 5.0

Revision Date 12.07.2026

Print Date 14.07.2026

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

1.1 Product identifier

Trade name : MANUDISH EXTRALEMOM
UFI : RR49-30VH-400H-9NA1

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

Use of the Substance/Mixture : Cleaning agent
Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : Tana Chemie GmbH
Rheinallee 96
55120 Mainz
Telephone : +49613196403
Telefax : +4961319642526
E-mail address : Produktsicherheit@werner-mertz.com
Responsible/issuing person
Contact person : Product development / product safety

1.4 Emergency telephone

EU: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2 H315: Causes skin irritation.
Eye irritation, Category 2 H319: Causes serious eye irritation.
Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

Precautionary Statements : P102 Keep out of reach of children.

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Prevention:

P280

Wear protective gloves/ eye protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313

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

Hazardous ingredients which must be listed on the label:

2-methyl-2H-isothiazol-3-one

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

Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

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

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 : Aqueous surfactant solution.

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3 500-234-8 01-2119488639-16	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412 specific concentration limit Eye Irrit. 2; H319 5 - < 10 % Eye Dam. 1; H318 >= 10,0 %	>= 15 - < 20
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts	147170-44-3 931-333-8 01-2119489410-39	Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 3 - < 4

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		specific concentration limit Eye Irrit. 2; H319 > 4 - 10 % Eye Dam. 1; H318 > 10 %	
2-methyl-2H-isothiazol-3-one	2682-20-4 220-239-6 613-326-00-9	Acute Tox. 3; H301 Acute Tox. 2; H330 Skin Corr. 1B; H314 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Eye Dam. 1; H318 Acute Tox. 3; H311 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1010 M-Factor (Chronic aquatic toxicity): 11 specific concentration limit Skin Sens. 1; H317 ≥ 0,0015 % Skin Corr. 1B; H314 ≥ 5 % Skin Irrit. 2; H315 1 - < 5 % Eye Dam. 1; H318 ≥ 3 % Eye Irrit. 2; H319 1 - < 3 % Aquatic Acute 1; H400 ≥ 25 % Aquatic Chronic 2; H411 ≥ 25 % Aquatic Chronic 3; H412 2,5 - < 25 % Skin Sens. 1A; H317 ≥ 0,0015 %	≥ 0,0025 - < 0,025
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6 01-2120761540-60	Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Acute Tox. 2; H330 Acute Tox. 4; H302 Skin Irrit. 2; H315 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 11 M-Factor (Chronic aquatic toxicity): 11	≥ 0,0025 - < 0,025

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		specific concentration limit Skin Sens. 1A; H317 ≥ 0,036 % Skin Irrit. 2; H315 ≥ 10 % Eye Dam. 1; H318 ≥ 3 % Eye Irrit. 2; H319 1 - < 3 % Aquatic Acute 1; H400 ≥ 25 % Aquatic Chronic 2; H411 ≥ 25 % Aquatic Chronic 3; H412 2,5 - < 25 % Acute toxicity estimate Acute oral toxicity: 500,0 mg/kg 450 mg/kg Acute inhalation toxicity (dust/mist): 0,21 mg/l	
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SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	: Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance.
If inhaled	: Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.
In case of eye contact	: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Protect unharmed eye. Continue rinsing eyes during transport to hospital.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	: Allergic reactions
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Risks : Irritation
: No information available.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

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

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., Treat recovered material as described in the section "Disposal considerations"., Refer to section 15 for specific national regulation.

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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 sensitization 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.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Store in original container. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container.
- Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : Cleaning agent

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	Routes of exposure	Potential health effects	Value
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	Workers	Inhalation	Long-term systemic effects	175 mg/m3
	Consumers	Inhalation	Long-term systemic effects	52 mg/m3
	Consumers	Ingestion	Long-term systemic effects	15 mg/kg bw/day
	Consumers	Skin contact	Long-term local effects	0,079 mg/cm2
	Workers	Skin contact	Long-term systemic	5830 mg/kg

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			effects	bw/day
	Consumers	Skin contact		2500 mg/kg bw/day
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts	Workers	Inhalation	Long-term systemic effects	44 mg/m3
	Workers	Dermal	Long-term systemic effects	12,5 mg/kg
	Consumers	Oral	Long-term systemic effects	7,5 mg/kg
	Consumers	Dermal	Long-term systemic effects	7,5 mg/kg

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

Substance name	Environmental Compartment	Value
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	Fresh water	0,129 mg/l
	Sea water	0,024 mg/l
	Fresh water sediment	4,835 mg/kg dry weight (d.w.)
	Sea sediment	0,4835 mg/kg dry weight (d.w.)
	Soil	7,5 mg/kg dry weight (d.w.)
	STP	10000 mg/l
	intermittent release	0,071 mg/l
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts	Fresh water	0,0135 mg/l
	Sea water	0,00135 mg/l
	Fresh water sediment	1 mg/kg
	Sea sediment	0,1 mg/kg

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	STP	3000 mg/l
	Soil	0,8 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye/face protection : If splashes are likely to occur, wear:
Tightly fitting safety goggles

Hand protection

Material : For prolonged or repeated contact use protective gloves.

It is suggested the usage of chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

As alternative, a different type of gloves might be used if, accordingly to the recommendations of the producer, guarantee the same level of protection.

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Skin and body protection : not required under normal use

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

Recommended Filter type:

ABEK-P3-filter

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Color : yellow-orange

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Odor	: fruity
Melting point/freezing point	: No data available
Boiling point/boiling range	: No information available.
Flammability (solid, gas)	: No data available
Flammability (liquids)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Flash point	: does not flash
Ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: ca. 6,5, 100 % at 20 °C
Viscosity, dynamic	: 300 - 600 mPa.s
Viscosity, kinematic	: No data available
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Vapor pressure	: No data available
Density	: ca. 1,030 g/cm ³
Relative density	: No data available
Relative vapor density	: No data available
Particle characteristics	: No data available

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.
No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

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Materials to avoid : No data available

10.6 Hazardous decomposition products

No hazardous decomposition products are known.
No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Our company is strongly against animal testing.
Our company does not place any orders for animal testing for the finished product or the ingredients.
However, as a result of EU legislation (REACH Regulation), the manufacturers of ingredients or EU importers are obliged to test ingredients with regard to their effects on human health and the environment before they are brought onto the market. Some of the tests made necessary by this took place decades ago.

Acute toxicity

Not classified due to lack of data.
Acute toxicity : Not Rated

Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Acute oral toxicity	: LD50 (Rat): 2.000 - 5.000 mg/kg Method: OECD Test Guideline 401
Acute dermal toxicity	: LD50 Dermal (Rat): > 2.000 mg/kg Method: OECD Test Guideline 402 GLP: yes

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts

147170-44-3:

Acute oral toxicity	: LD50 Oral (Rat): > 5.000 mg/kg Method: OECD Test Guideline 401 LD50 Oral (Rat): 2.335 mg/kg LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 402
Acute dermal toxicity	: LD50 Dermal (Rat): > 2.000 mg/kg Method: OECD Test Guideline 402

2-methyl-2H-isothiazol-3-one

2682-20-4:

Acute oral toxicity	: LD50 (Rat): 300 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 0,00053 mg/l Exposure time: 4 h
Acute dermal toxicity	: LD50 (Rat): > 2.000 mg/kg

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

2634-33-5:

Acute oral toxicity	:	LD50 (Rat): 1.150 mg/kg Acute toxicity estimate: 500,0 mg/kg Method: Converted acute toxicity point estimate LD50 (Rat): 1.193 mg/kg LD50 (Rat, male and female): 784 mg/kg Method: OECD Test Guideline 401 GLP: yes LD50 (Rat): 490 mg/kg LD50 (Rat): 670 mg/kg Acute toxicity estimate: 450 mg/kg Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008
Acute inhalation toxicity	:	LC50 (Rat): 0,25 mg/l Exposure time: 4 h Test atmosphere: dust/mist LC50 (Rat): 0,5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OPPTS 870.1300 GLP: yes LC50 (Rat): 0,11 mg/l Test atmosphere: dust/mist Acute toxicity estimate: 0,21 mg/l Test atmosphere: dust/mist Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008
Acute dermal toxicity	:	LD50 (Rat): 4.115 mg/kg LD50 (Rat, male and female): > 2.000 mg/kg GLP: yes LD50 Dermal (Rabbit): > 2.000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

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Species	:	Rabbit
Assessment	:	Irritating to skin.
Method	:	OECD Test Guideline 404

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts

147170-44-3:

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

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

2634-33-5:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : May cause irreversible eye damage.

Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Species	:	Rabbit
Assessment	:	Risk of serious damage to eyes.
Method	:	OECD Test Guideline 405

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts

147170-44-3:

Result	:	Causes serious eye damage.
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1,2-benzisothiazol-3(2H)-one

2634-33-5:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Causes serious eye damage.

Species	:	Bovine cornea
Method	:	OECD Test Guideline 437
Result	:	Risk of serious damage to eyes.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified due to lack of data.

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Product:

Remarks : Causes sensitization.

Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Routes of exposure : Dermal
Species : Guinea pig
Result : Does not cause skin sensitization.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts

147170-44-3:

Species : Guinea pig
Method : OECD Test Guideline 406
Result : Not a skin sensitizer.

2-methyl-2H-isothiazol-3-one

2682-20-4:

Routes of exposure : Dermal
Species : Guinea pig
Method : OECD Test Guideline 406
Result : May cause sensitization by skin contact.

Species : Mouse
Method : OECD Test Guideline 429
Result : Causes sensitization.

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

2634-33-5:

Routes of exposure : Dermal
Species : Guinea pig
Method : OECD Test Guideline 406
Result : May cause sensitization by skin contact.

Routes of exposure : Dermal
Species : Mouse
Method : OECD Test Guideline 429
Result : May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified due to lack of data.

Germ cell mutagenicity : Not Rated

Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: negative

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Carcinogenicity

Not classified due to lack of data.

Carcinogenicity : Not Rated

Reproductive toxicity

Not classified due to lack of data.

Reproductive toxicity : Not Rated

STOT-single exposure

Not classified due to lack of data.

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

STOT-repeated exposure

Not classified due to lack of data.

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

Aspiration toxicity

Not classified due to lack of data.

Aspiration toxicity : Not Rated

11.2 Information on other hazards

Endocrine disrupting properties

Product:

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

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 7,1 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203
GLP: yes

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	LC50 (Fish): > 1 - 10 mg/l Test Type: flow-through test Method: OECD Test Guideline 203
	LC50 (Leuciscus idus (Golden orfe)): 10 - 100 mg/l Method: OECD Test Guideline 203
	NOEC (Oncorhynchus mykiss (rainbow trout)): 0,14 mg/l Exposure time: 28 d Test Type: flow-through test Method: OECD Test Guideline 204
	LC50 (Brachydanio rerio (zebrafish)): 1 - 10 mg/l Exposure time: 96 h Test Type: flow-through test Method: OECD Test Guideline 203
	LC50 (Brachydanio rerio (zebrafish)): 7,1 mg/l Exposure time: 96 h
	NOEC (Fish): 0,1 - 1 mg/l Exposure time: 28 Days
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia pulex (Water flea)): 7,4 mg/l Exposure time: 48 h Test Type: Immobilization Method: OECD Test Guideline 202
	EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
	NOEC (Daphnia magna (Water flea)): 0,27 mg/l Exposure time: 21 d Test Type: flow-through test Method: OECD Test Guideline 211
	EC50 (Daphnia): 1 - 10 mg/l Exposure time: 48 h
	NOEC (Daphnia): 0,1 - 1 mg/l Exposure time: 21 Days
Toxicity to algae/aquatic plants	: EC50 (Desmodesmus subspicatus (green algae)): 27,7 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201 GLP: yes
	EC50 (Desmodesmus subspicatus (green algae)): > 10 - 100 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201
	NOEC : 0,95 mg/l Test Type: Growth inhibition Method: OECD Test Guideline 201
	NOEC (Desmodesmus subspicatus (green algae)): 0,93 mg/l Exposure time: 72 h

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	Test Type: static test Method: OECD Test Guideline 201
	EC50 (algae): 27,7 mg/l Exposure time: 72 h Test Type: Growth inhibition
	NOEC (algae): 0,93 mg/l Exposure time: 72 h
	EC50 (algae): 10 - 100 mg/l Exposure time: 72 h
	NOEC (algae): 0,1 - 1 mg/l Exposure time: 72 h
Toxicity to microorganisms	: EC50 (<i>Pseudomonas putida</i>): > 10 g/l Exposure time: 16 h Test Type: Cell multiplication inhibition test Method: DIN 38412 GLP: yes
	EC10 (<i>Pseudomonas putida</i>): > 10 g/l Exposure time: 16 h Test Type: Cell multiplication inhibition test
Toxicity to fish (Chronic toxicity)	: NOEC: 1 - 10 mg/l Species: <i>Leuciscus idus</i> (Golden orfe)
	NOEC: 0,14 mg/l Exposure time: 28 d Species: <i>Oncorhynchus mykiss</i> (rainbow trout) Method: OECD Test Guideline 204
	NOEC: 0,2 mg/l Exposure time: 28 d Species: Fish
	NOEC: > 0,1 - 1 mg/l Exposure time: 28 d Species: <i>Oncorhynchus mykiss</i> (rainbow trout) Method: OECD Test Guideline 204
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: > 0,1 - 1 mg/l Exposure time: 21 d Species: <i>Daphnia magna</i> (Water flea) Method: OECD Test Guideline 211
	EC50: 0,37 mg/l Exposure time: 21 d
	0,74 mg/l Exposure time: 21 d
	NOEC: 0,27 mg/l Exposure time: 21 d
Toxicity to soil dwelling organisms	: NOEC: 750 mg/kg Exposure time: 56 d Species: <i>Eisenia fetida</i> (earthworms) Method: OECD Test Guideline 222

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Remarks: Information taken from reference works and the literature.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts

147170-44-3:

Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 2 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 LC50 (Brachydanio rerio): > 1 - 10 mg/l Method: ISO 7346/2 NOEC (Oncorhynchus mykiss (rainbow trout)): > 0,1 - 1 mg/l LC50 (Fish): 1,1 mg/l
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 1 - 10 mg/l Method: OECD Test Guideline 202 NOEC (Daphnia magna (Water flea)): > 0,1 - 1 mg/l Method: OECD Test Guideline 211
Toxicity to algae/aquatic plants	: EC50 (Desmodesmus subspicatus (green algae)): > 1 - 10 mg/l Method: OECD Test Guideline 201 ErC50 (algae): 2,4 mg/l
Toxicity to microorganisms	: EC0 (Pseudomonas putida): > 100 mg/l Method: OECD Test Guideline 209
Toxicity to fish (Chronic toxicity)	: NOEC: > 0,1 - 1 mg/l Species: Oncorhynchus mykiss (rainbow trout) Method: OECD Test Guideline 210 NOEC: 0,135 mg/l
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: > 0,1 - 1 mg/l Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

2-methyl-2H-isothiazol-3-one

2682-20-4:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 6,0 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 NOEC (Pimephales promelas (fathead minnow)): 2,38 mg/l Exposure time: 28 d LC50 (Lepomis macrochirus (Bluegill sunfish)): 12,4 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia): 1,68 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 NOEC (Daphnia): 0,55 mg/l Exposure time: 21 d Method: OECD Test Guideline 211

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Toxicity to algae/aquatic plants	:	EC50 (<i>Pseudokirchneriella subcapitata</i> (green algae)): 0,157 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (<i>Pseudokirchneriella subcapitata</i> (green algae)): 0,03 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10 10
Toxicity to microorganisms	:	EC20 (activated sludge): 2,8 mg/l Exposure time: 3 h Method: DIN 38412 EC50 (activated sludge): 34,6 mg/l Exposure time: 3 h Method: DIN 38412 (<i>Pseudomonas putida</i>): 2,3 mg/l Exposure time: 16 h
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,55 mg/l Exposure time: 28 d Species: <i>Pimephales promelas</i> (fathead minnow) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,55 mg/l Exposure time: 21 d Species: <i>Daphnia</i> Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1 1

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

2634-33-5:

Toxicity to fish	:	LC50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): 16,0 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 LC50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): 2,18 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 203 GLP: yes LC50 (<i>Cyprinodon variegatus</i> (sheepshead minnow)): ca. 16,7 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: yes GLP: yes NOEC (<i>Oncorhynchus mykiss</i> (rainbow trout)): 0,21 mg/l Exposure time: 28 d
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	Method: OECD Test Guideline 215
	NOEC (Oncorhynchus mykiss (rainbow trout)): 2,1 mg/l Exposure time: 28 d Method: OECD Test Guideline 215
	LC50 (Oncorhynchus mykiss (rainbow trout)): 1,6 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
	LC50 (Oncorhynchus mykiss (rainbow trout)): 2,2 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia): 32,6 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
	EC50 (Daphnia magna (Water flea)): 2,94 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
	EC0 (Daphnia magna (Water flea)): 0,643 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
	EC50 (Mysidopsis bahia (opossum shrimp)): 0,9893 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: yes GLP: yes
	NOEC (Daphnia): 1,02 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
	NOEC (Daphnia): 12 mg/l Exposure time: 21 d
	EC50 (Daphnia magna (Water flea)): 3,27 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	: EC10 (Pseudokirchneriella subcapitata (green algae)): 0,04 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
	EC50 (Pseudokirchneriella subcapitata (green algae)): 1,1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
	EC50 (Selenastrum capricornutum (green algae)): 1,1 mg/l Exposure time: 72 h Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes

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		NOEC (Selenastrum capricornutum (green algae)): 0,04 mg/l Exposure time: 72 h Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
		EC100 (Pseudokirchneriella subcapitata (green algae)): 0,067 mg/l Exposure time: 72 h
		NOEC (Pseudokirchneriella subcapitata (green algae)): 0,4 mg/l Exposure time: 72 h
		ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,11 mg/l Exposure time: 72 h
		NOEC (Skeletonema costatum (marine diatom)): 0,027 mg/l Exposure time: 72 h
		EC50 (Selenastrum capricornutum (green algae)): 0,11 mg/l Exposure time: 72 h
		NOEC (Selenastrum capricornutum (green algae)): 0,04 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	1 1
Toxicity to microorganisms	:	EC20 (activated sludge): 3,3 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 EC50 (activated sludge): 13 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,21 mg/l Species: Oncorhynchus mykiss (rainbow trout) Method: OECD Test Guideline 215
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 1,2 mg/l Exposure time: 21 d Species: Daphnia Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1 1

12.2 Persistence and degradability

Product:

Biodegradability	:	Remarks: The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.
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Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Biodegradability	:	Test Type: aerobic Result: rapidly biodegradable Biodegradation: > 70 % Exposure time: 28 d Method: OECD 301 A
		Test Type: anaerobic Result: Biodegradable Biodegradation: > 60 % Exposure time: 41 d Method: OECD 301 D
		Result: Readily biodegradable. Biodegradation: 93 % Exposure time: 28 d

Biochemical Oxygen Demand (BOD)	:	285 mg/g Incubation time: 5 d
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Chemical Oxygen Demand (COD)	:	518 mg/g
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1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts

147170-44-3:

Biodegradability	:	Result: rapidly biodegradable Biodegradation: 86 % Method: OECD 301 D
Biochemical Oxygen Demand (BOD)	:	365 mg/g Method: see user defined free text
Chemical Oxygen Demand (COD)	:	704 mg/g Method: DIN 38409-H-41

2-methyl-2H-isothiazol-3-one

2682-20-4:

Biodegradability	:	Test Type: see user defined free text Concentration: 1 mg/l Result: Biodegradable Biodegradation: 90 % Exposure time: 14 d Method: see user defined free text
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1,2-benzisothiazol-3(2H)-one

2634-33-5:

Biodegradability	:	Test Type: Primary biodegradation Result: Biodegradable Biodegradation: > 90 % Method: see user defined free text
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12.3 Bioaccumulative potential

Components:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

2-methyl-2H-isothiazol-3-one

2682-20-4:

Bioaccumulation : Bioconcentration factor (BCF): 3,16

Partition coefficient: n-octanol/water : log Pow: <= 0,32

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

2634-33-5:

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 6,95
Method: OECD Test Guideline 305

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

12.4 Mobility in soil

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:

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

68891-38-3:

Assessment : Not very persistent and very bioaccumulative (vPvB).. Not persistent, bioaccumulative, and toxic (PBT).

2-methyl-2H-isothiazol-3-one

2682-20-4:

Assessment : Not very persistent and very bioaccumulative (vPvB).. Not persistent, bioaccumulative, and toxic (PBT).

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

2634-33-5:

Assessment : Not very persistent and very bioaccumulative (vPvB).. Not persistent, bioaccumulative, and toxic (PBT).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article

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57(f) or Commission Delegated regulation (EU) 2017/2100 or
Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information : There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. In accordance with local and national regulations.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.
Waste Code	European Waste Catalog 20 01 29* According to the European Waste Catalog, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

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

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14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not regulated as a dangerous good

IATA

Not dangerous goods

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

For personal protection see section 8.

14.7 Maritime transport in bulk according to IMO instruments

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) : See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : 5989-27-5
78-70-6
5392-40-5
2682-20-4
2634-33-5
See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

: Directive 96/82/EC does not apply

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

TA Luft List (Germany) : Total dust: Not applicable
: Inorganic substances in powdered form: Not applicable
: Inorganic substances in gaseous form: Not applicable
: Organic Substances: : portionClass 1: 0,02 %
: Carcinogenic substance: Not applicable
: Quartz fine dust PM4: Not applicable
: Formaldehyde: Not applicable
: fibers: Not applicable
: Germ cell mutagens: Not applicable
: Substances toxic to reproduction: Not applicable
: Poorly degradable, easily enrichable and highly toxic organic substances: Not applicable

Volatile organic compounds (VOC) content : Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)
Update: Percent volatile: 0,13 %

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according to Detergents Regulation EC 648/2004	: 15 - <30% anionic surfactants, <5% amphoteric surfactants, perfumes, LIMONENE, LINALOOL, CITRAL, METHYLISOTHIAZOLINONE, BENZISOTHIAZOLINONE
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15.2 Chemical Safety Assessment

There is no data available for this product.

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.
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.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Dam.	: Serious eye damage
Skin Corr.	: Skin corrosion
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitization

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 Standardization; 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 Organization 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, Authorization 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

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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:

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317

Classification procedure:

Calculation method
Calculation method
Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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