



APESIN AP 100 PLUS

WM 0714016

Order number: 0714016

Version 2.0

Revision Date 31.10.2019

Print Date 23.01.2020

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

1.1 Product identifier

Trade name : APESIN AP 100 PLUS
Identification number : 40000275

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

Use of the Substance/Mixture : Biocidal product
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 : +4961319642414
E-mail address : Produktsicherheit@werner-mertz.com
Responsible/issuing person
Contact person : Product development / product safety

1.4 Emergency telephone number

112
+49(0)6131-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Sub-category 1B H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1 H318: Causes serious eye damage.
Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





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Signal word	:	Danger	
Hazard statements	:	H314 H412	Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P273 P280	Avoid release to the environment. Wear protective gloves/ eye protection/ face protection.
		Response: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	Immediately call a POISON CENTER/doctor.
		P310 Disposal: P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

pentapotassium
bis(peroxymonosulphate)
bis(sulphate)
dipotassium peroxodisulphate

Additional Labelling:

Safety data sheet available on request.

EUH208 Contains dipotassium peroxodisulphate. May produce an allergic reaction.

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Formulated product

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)



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pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8 274-778-7	Skin Corr. 1B; H314 Acute Tox. 4; H302 Aquatic Chronic 3; H412	>= 40 - < 50
sodium dodecyl sulphate	151-21-3 205-788-1	Eye Dam. 1; H318 Acute Tox. 4; H302 Skin Irrit. 2; H315 SCL 10 - < 20 % 2; H319 >= 20 % 1; H318	>= 10 - < 15
(+)-tartaric acid	87-69-4 201-766-0 01-2119537204-47	Eye Dam. 1; H318	>= 10 - < 15
sodium benzoate	532-32-1 208-534-8 01-2119460683-35	Eye Irrit. 2; H319	>= 10 - < 15
Alcohols, C9 – C11 –iso-, C10 –rich, ethoxylated	78330-20-8 02-2119549526-31	Eye Dam. 1; H318 Acute Tox. 4; H302 SCL 1 - 10 % 2; H319 > 10 % 1; H318	>= 3 - < 5
sodium carbonate	497-19-8 207-838-8 01-2119485498-19	Eye Irrit. 2; H319	>= 2 - < 5
dipotassium peroxodisulphate	7727-21-1 231-781-8	Ox. Sol. 3; H272 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335	>= 0 - < 1

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Consult a physician.



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- Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Protect unharmed eye.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician immediately.
Continue rinsing eyes during transport to hospital.
- 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 induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : corrosive effects
- Risks : No information available.

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 firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : No hazardous combustion products are known



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5.3 Advice for firefighters

Special protective equipment for firefighters : 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.
Avoid dust formation.
Avoid breathing dust.
Ensure adequate ventilation.
Evacuate personnel to safe areas.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Do not flush into surface water or sanitary sewer system.
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 : Neutralize with chalk, alkali solution or ammonia.
Pick up and arrange disposal without creating dust.
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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire : Avoid dust formation. Provide appropriate exhaust ventilation at



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and explosion

places where dust is formed.

Hygiene measures

: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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. Store in cool place. Store at room temperature in the original container.

Other data

: No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s)

: Biocidal product

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

(+)-tartaric acid
87-69-4:

: End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 8,1 mg/kg

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 1,5 mg/kg

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 2,9 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 5,2 mg/m³

End Use: Consumers
Exposure routes: Inhalation



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sodium benzoate
532-32-1:

Potential health effects: Long-term systemic effects
Value: 1,3 mg/m³

: End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 34,7 mg/kg

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term local effects
Value: 4,5 mg/cm²

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 10,4 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 6,3 mg/m³

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 25 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 2,1 mg/m³

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 20,8 mg/kg

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term local effects
Value: 2,7 mg/cm²

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 1,3 mg/m³

sodium carbonate
497-19-8:

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 10 mg/m³

End Use: Consumers
Exposure routes: Inhalation



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Potential health effects: Acute local effects
Value: 10 mg/m³

dipotassium peroxodisulphate : End Use: Workers
7727-21-1: Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 2,06 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute systemic effects
Value: 590 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 2,06 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 18,2 mg/kg

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Acute systemic effects
Value: 400 mg/kg

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term local effects
Value: 0,102 mg/cm²

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Acute local effects
Value: 2,248 mg/cm²

PNEC

pentapotassium bis(peroxymonosulphate) bis(sulphate) : Fresh water
70693-62-8: Value: 0,022 mg/l

Marine water
Value: 0,00222 mg/l

Fresh water sediment
Value: 0,0782 mg/kg

Marine sediment
Value: 0,00796 mg/kg

Soil



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	Value: 1 mg/kg
	Sewage treatment plant Value: 108 mg/l
	Intermittent use/release Value: 0,0109 mg/l
	Oral Value: 44,44 mg/kg
sodium dodecyl sulphate 151-21-3:	: Fresh water Value: 0,137 mg/l
	Marine water Value: 0,0137 mg/l
	Fresh water sediment Value: 4,82 mg/kg
	Marine sediment Value: 0,482 mg/kg
	Soil Value: 0,882 mg/kg
	Intermittent use/release Value: 0,055 mg/l
(+)-tartaric acid 87-69-4:	: Fresh water Value: 0,3125 mg/l
	Marine water Value: 0,3125 mg/l
	Fresh water sediment Value: 1,141 mg/kg
	Marine sediment Value: 1,141 mg/kg
	Soil Value: 0,0449 mg/kg
	Sewage treatment plant Value: 10 mg/l
sodium benzoate 532-32-1:	: Fresh water Value: 0,13 mg/l
	Marine water Value: 0,013 mg/l
	Intermittent use/release Value: 0,305 mg/l



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	Fresh water sediment Value: 1,76 mg/kg
	Marine sediment Value: 0,176 mg/kg
	Soil Value: 0,275 mg/kg
	Sewage treatment plant Value: 10 mg/l
dipotassium peroxodisulphate 7727-21-1:	Fresh water Value: 0,0763 mg/l
	Marine water Value: 0,011 mg/l
	Fresh water sediment Value: 0,275 mg/kg
	Soil Value: 0,015 mg/kg
	Sewage treatment plant Value: 3,6 mg/l
	Intermittent use/release Value: 0,763 mg/l
	Marine sediment Value: 0,0396 mg/kg

8.2 Exposure controls

Personal protective equipment

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

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 374-1: 2003 (0,4 mm).
As alternative, a different type of gloves might be used if, accordingly to the recommendations of the producer, guarantee the same level of protection.

Glove thickness : 0,4 mm



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- Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.
- 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 : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Remove and wash contaminated clothing before re-use.
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Remove and wash contaminated clothing before re-use.
- Respiratory protection : No personal respiratory protective equipment normally required.
Breathing apparatus only if aerosol or dust is formed.
(in case of higher concentration)
Recommended Filter type:
ABEK-P3-filter
- Not required; except in case of aerosol formation.
Recommended Filter type:
ABEK-P3-filter

Environmental exposure controls

- General advice : Do not flush into surface water or sanitary sewer system.
- Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : granular
- Colour : white
- Odour : characteristic
- Odour Threshold : No data available
- pH : ca. 4, Concentration: 5,00 g/l
- Melting point/range : No data available



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Boiling point/boiling range	: No information available.
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Flammability (liquids)	: No data available
Burning rate	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Bulk density	: ca. 775 kg/m ³
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: 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	: No data available
Oxidizing properties	: The product has been shown not to be oxidizing in a test following Directive 67/548/EEC (Method A17, Oxidizing properties).

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.



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10.4 Conditions to avoid

Conditions to avoid : Heat

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.
Other information : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Skin corrosion/irritation : Causes skin burns.
Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation : Causes eye burns.
May cause irreversible eye damage.

Respiratory or skin sensitisation : No data available

Germ cell mutagenicity : Not Rated

Carcinogenicity : Not Rated

Reproductive toxicity : Not Rated

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

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

Aspiration toxicity : Not Rated

Further information : No data available

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate)



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70693-62-8:

Germ cell mutagenicity

Genotoxicity in vitro : Method: OECD Test Guideline 471
In vitro tests did not show mutagenic effects

sodium dodecyl sulphate

151-21-3:

Acute oral toxicity : LD50 Rat: 1.288 mg/kg

Acute inhalation toxicity : LC50 Rat: 3,9 mg/l

Germ cell mutagenicity

Genotoxicity in vitro : Method: OECD Test Guideline 471
In vitro tests did not show mutagenic effects

(+)-tartaric acid

87-69-4:

Acute oral toxicity : see user defined free text Rat: 7.500 mg/kg

LD50 Oral Rat, female: > 2.000 mg/kg
Method: OECD Test Guideline 423

Acute dermal toxicity : LD50 Dermal Rat: > 2.000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation : Result: No skin irritation

Serious eye damage/eye irritation : Result: Causes serious eye damage.
GLP: see user defined free text

Teratogenicity : Species: Rat
181 mg/kg

Repeated dose toxicity : Rat: NOAEL: 2.460 mg/kg
Application Route: Oral

sodium benzoate

532-32-1:

Acute oral toxicity : LD50 Oral Rat: 3.140 mg/kg

Acute inhalation toxicity : LC50 Rat: 12,2 mg/l

Acute dermal toxicity : LD50 Dermal Rabbit: > 2.000 mg/kg



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Alcohols, C9 – C11 –iso-, C10 –rich, ethoxylated

78330-20-8:

Acute oral toxicity	: LD50 Oral Rat: 500 - 2.000 mg/kg
	LD50 Oral Rat: > 300 - 2.000 mg/kg Method: OECD Test Guideline 401
Acute dermal toxicity	: LD50 Dermal Rat: > 2.000 mg/kg Method: OECD Test Guideline 402
Skin corrosion/irritation	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404
Serious eye damage/eye irritation	: Species: Rabbit Result: Irreversible effects on the eye Method: OECD Test Guideline 405
Respiratory or skin sensitisation	: Test Method: Maximisation Test Species: Guinea pig Result: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 406

sodium carbonate

497-19-8:

Acute oral toxicity	: LD50 Rat: 2.800 mg/kg
	LD50 Oral Rat: 4.090 mg/kg
Acute inhalation toxicity	: LC50 Rat: 2,3 mg/l Exposure time: 2 h Method: OECD Test Guideline 403
	LC50 Mouse: 1,2 mg/l Exposure time: 2 h
Acute dermal toxicity	: LD50 Dermal Rabbit: > 2.000 mg/kg
Skin corrosion/irritation	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404
Serious eye damage/eye irritation	: Species: Rabbit Result: Eye irritation



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Respiratory or skin sensitisation : Result: Not a skin sensitizer.

dipotassium peroxodisulphate 7727-21-1:

Acute oral toxicity : LD50 Oral Rat: 742 mg/kg
Method: OECD Test Guideline 401

Acute toxicity estimate : 500,0 mg/kg
Method: Converted acute toxicity point estimate

Acute inhalation toxicity : LC50 Rat: 5,1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal Rat: > 2.000 mg/kg

SECTION 12: Ecological information

12.1 Toxicity

Components:

pentapotassium bis(peroxymonosulphate) bis(sulphate) 70693-62-8:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 53 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3,5 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae : ErC50 : > 1 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC: 0,222 mg/l
Exposure time: 37 d
Species: Cyprinodon variegatus (sheepshead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,267 mg/l
Exposure time: 24 h
Species: Daphnia (water flea)

sodium dodecyl sulphate

151-21-3:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 4,5 mg/l
Exposure time: 96 h



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Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 6 mg/l Exposure time: 48 h
Toxicity to algae	: IC50 (Desmodesmus subspicatus (green algae)): 53 mg/l Exposure time: 72 h
Toxicity to bacteria	: EC50 (Aliivibrio fischeri): 0,46 mg/l Exposure time: 30 min
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: Species: Ceriodaphnia dubia (water flea)
(+)-tartaric acid 87-69-4:	
Toxicity to fish	: LC0 (Carassius auratus (goldfish)): 200 mg/l LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia (water flea)): 135 mg/l Exposure time: 24 h EC50 (Daphnia magna (Water flea)): 93,31 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Selenastrum capricornutum): 51,4 mg/l Exposure time: 48 h Method: OECD Test Guideline 201 EC50 (Pseudokirchneriella subcapitata (green algae)): 51,4 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
sodium benzoate 532-32-1:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 NOEC (Daphnia magna (Water flea)): 51 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
Toxicity to algae	: (Chlorella vulgaris (Fresh water algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201



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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 51 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: see user defined free text

Alcohols, C9 – C11 –iso-, C10 –rich, ethoxylated 78330-20-8:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 10 - 100 mg/l
Exposure time: 96 h
Method: DIN 38412

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 10 - 100 mg/l
Exposure time: 48 h
Method: DIN 38412

NOEC (Daphnia magna (Water flea)): 12,5 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 10 - 100 mg/l
Method: see user defined free text

EC50 (Scenedesmus subspicatus): > 10 - 100 mg/l
Method: see user defined free text

Toxicity to bacteria : EC10 (activated sludge): 48 mg/l
Exposure time: 17 h
Method: DIN 38412

sodium carbonate 497-19-8:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 300 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 200 - 227 mg/l
Exposure time: 48 h

EC50 (Daphnia (water flea)): 264 mg/l
Exposure time: 48 h

12.2 Persistence and degradability

Components:

(+)-tartaric acid

87-69-4:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 85 %
Exposure time: 28 d
Method: OECD Test Guideline 306

ThOD : 0,533 g/g

sodium benzoate 532-32-1:



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Biodegradability : Result: Readily biodegradable.
Biodegradation: 90 %
Exposure time: 7 d
Method: OECD 301 B

Alcohols, C9 – C11 –iso-, C10 –rich, ethoxylated 78330-20-8:

Biodegradability : Biodegradation: > 90 %
Method: OECD 301 E

Result: rapidly biodegradable
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD 301 B

Biochemical Oxygen Demand (BOD) : 1.650 mg/g
Incubation time: 30 d

Chemical Oxygen Demand (COD) : 2.500 mg/g

12.3 Bioaccumulative potential

Components:

sodium dodecyl sulphate

151-21-3:

Bioaccumulation : Bioconcentration factor (BCF): 71

Partition coefficient: n-octanol/water : log Pow: 1,6

(+)-tartaric acid

87-69-4:

Partition coefficient: n-octanol/water : log Pow: -0,76

sodium benzoate

532-32-1:

Partition coefficient: n-octanol/water : log Pow: -2,27

Alcohols, C9 – C11 –iso-, C10 –rich, ethoxylated

78330-20-8:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil

Components:

sodium dodecyl sulphate

151-21-3:

Distribution among environmental compartments : Koc: 10000Remarks: immobile



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12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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 contaminate ponds, waterways or ditches with chemical or used container.
Offer surplus and non-recyclable solutions to a licensed disposal company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

ADR : 3260
IMDG : 3260
IATA : 3260

14.2 Proper shipping name

ADR : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
(pentapotassium bis(peroxymonosulphate) bis(sulphate))

IMDG : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
(pentapotassium bis(peroxymonosulphate) bis(sulphate))

IATA : Corrosive solid, acidic, inorganic, n.o.s. Not permitted for transport

14.3 Transport hazard class

ADR : 8
IMDG : 8
IATA : 8

14.4 Packing group

ADR :
Classification Code : C2
Packaging group : III
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)
IMDG



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Packaging group : III
Labels : 8
EmS Number : F-A, S-B
IATA
(Cargo) : Corrosive solid, acidic, inorganic, n.o.s. Not permitted for transport
Packaging group : III
Labels : 8

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

IATA

Environmentally hazardous : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

For personal protection see section 8.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

TA Luft List (Germany) : Total dust: Not applicable
: Inorganic substances in powdered form: Not applicable
: Inorganic substances in vapour or gaseous form: Not applicable
: Organic Substances: : portionClass 1: 25 %
: Carcinogenic substances: Not applicable
: Mutagenic: Not applicable
: Toxic to reproduction: Not applicable



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according to Detergents : $\geq 30\%$ oxygen-based bleaching agents, 5 - $< 15\%$ Anionic
Regulation EC 648/2004 surfactants, $< 5\%$ phosphonates, Non-ionic surfactants, soap,
Perfumes

GISBAU (D) : GD 13

15.2 Chemical safety assessment

There is no data available for this product.

SECTION 16: Other information

Full text of H-Statements

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Further information

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Classification procedure:	H314	Calculation method
	H318	Calculation method
	H412	Calculation method

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



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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

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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