

SAFETY DATA SHEET

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



APESIN C 400

WM 0714535

Order number: 0714535

Version 3.1

Revision Date 04.09.2026

Print Date 09.09.2026

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

1.1 Product identifier

Trade name : APESIN C 400
UFI : XP32-H0Q6-500H-3J65

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 : +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)

Corrosive to Metals, Category 1	H290: May be corrosive to metals.
Skin corrosion, Category 1A	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H290 May be corrosive to metals.

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	H314	Causes severe skin burns and eye damage.
	H411	Toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements	: EUH031	Contact with acids liberates toxic gas.
Precautionary Statements	: Prevention:	
	P260	Do not breathe mist or vapors.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/ protective clothing/ 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.
	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER/ doctor.
	P391	Collect spillage.
	Disposal:	
	P501	Dispose of container into the collection of recyclables only when it is completely empty.

Hazardous ingredients which must be listed on the label:

sodium hydroxide
sodium hypochlorite
potassium hydroxide

Additional Labeling:

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

Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)
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	Index-No. Registration number		
potassium hydroxide	1310-58-3 215-181-3 019-002-00-8 01-2119487136-33	Acute Tox. 4; H302 Skin Corr. 1A; H314 Met. Corr. 1; H290 Eye Dam. 1; H318 specific concentration limit Skin Corr. 1A; H314 ≥ 5 % Skin Corr. 1B; H314 2 - < 5 % Skin Irrit. 2; H315 0,5 - < 2 % Eye Irrit. 2; H319 0,5 - < 2 % Acute toxicity estimate Acute oral toxicity: 500,0 mg/kg	≥ 3 - < 5
sodium hydroxide	1310-73-2 215-185-5 011-002-00-6 01-2119457892-27	Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 specific concentration limit Skin Corr. 1A; H314 ≥ 5 % Skin Corr. 1B; H314 2 - < 5 % Skin Irrit. 2; H315 0,5 - < 2 % Eye Irrit. 2; H319 0,5 - < 2 %	≥ 3 - < 5
Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides	308062-28-4 931-292-6 01-2119490061-47	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1 Acute toxicity estimate Acute oral toxicity: 1.064 mg/kg	≥ 3 - < 5
pentasodium 2-phosphonatobutane- 1,2,4-tricarboxylate	67170-90-5 266-595-6	Skin Irrit. 2; H315 Eye Irrit. 2; H319	≥ 3 - < 5
sodium hypochlorite	7681-52-9 017-011-00-1	Met. Corr. 1; H290 Eye Dam. 1; H318 Skin Corr. 1B; H314 STOT SE 3; H335 Aquatic Acute 1; H400	≥ 3 - < 5

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		Aquatic Chronic 1; H410 EUH031	
		M-Factor (Acute aquatic toxicity): 1010 M-Factor (Chronic aquatic toxicity): 11	
		specific concentration limit EUH031 >= 5 %	

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.
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.
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.
If symptoms persist, call a physician.
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.

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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 : Chlorine compounds

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.
Evacuate personnel to safe areas.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Neutralize with acid.
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.

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.

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Smoking, eating and drinking should be prohibited in the application area.

To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.

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. Store in cool place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store at room temperature in the original container. To maintain product quality, do not store in heat or direct sunlight.

Advice on common storage : Do not store near acids.

Further information on storage stability : No decomposition if stored and applied as directed. Protect from frost, heat and sunlight.

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.

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

Substance name	End Use	Routes of exposure	Potential health effects	Value
potassium hydroxide	Workers	Inhalation	Long-term local effects	1 mg/m ³
	Consumers	Inhalation	Long-term local effects	1 mg/m ³
sodium hydroxide	Workers	Inhalation	Long-term local effects	1,0 mg/m ³
	Workers	Inhalation	Long-term systemic effects, Long-term local effects	1,5 mg/m ³
	Workers	Inhalation	Short-term exposure, Local effects, Systemic effects	3 mg/m ³
	Consumers	Inhalation	Long-term local effects, Long-term systemic effects	0,6 mg/m ³

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	Consumers	Inhalation	Short-term exposure, Local effects, Systemic effects	1,2 mg/m3
	Consumers	Ingestion	Long-term local effects, Long-term systemic effects	25 mg/m3
Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides	Workers	Skin contact	Long-term systemic effects	11 mg/kg
	Consumers	Skin contact	Long-term systemic effects	5,5 mg/kg
	Consumers	Ingestion	Long-term systemic effects	0,44 mg/kg
	Workers	Inhalation	Long-term systemic effects	6,2 mg/m3
	Consumers	Inhalation	Long-term systemic effects	1,53 mg/m3
sodium hypochlorite, sodium hypochlorite (Solution ...%Cl active), sodium hypochlorite (Solution)	Consumers	Oral	Long-term systemic effects	0,26 mg/kg
	Workers	Inhalation	Long-term exposure, Local effects, Systemic effects	1,55 mg/m3
	Workers	Inhalation	Short-term exposure, Local effects, Systemic effects	3,1 mg/m3
	Consumers	Inhalation	Long-term exposure, Local effects, Systemic effects	1,55 mg/m3

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

Substance name	Environmental Compartment	Value
Amines, C12-14 (even numbered)- alkyldimethyl, N-oxides	Fresh water	0,0335 mg/l
	Sea water	0,00335 mg/l
	STP	24 mg/kg
	Oral	11,1 mg/kg

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	Fresh water sediment	5,24 mg/kg
	Sea sediment	0,524 mg/kg
	Soil	1,02 mg/kg
sodium hypochlorite, sodium hypochlorite (Solution ...%Cl active), sodium hypochlorite (Solution)	Fresh water	0,21 mg/l
	Sea water	0,042 mg/l
	intermittent release	0,26 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection

Material : 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.

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

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Physical state	: liquid
Color	: yellow
Odor	: chlorine-like
Melting point/freezing point	: No data available
Boiling point/boiling range	: No data 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	: No data available
Ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: ca. 12, 1 % at 20 °C
Viscosity, dynamic	: No data available
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	: ca. 23 hPa at 20 °C
Density	: ca. 1,13 g/cm ³ at 20 °C
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.
Contact with acids liberates toxic gas.
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

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

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials

Materials to avoid : Acids

No data available

10.6 Hazardous decomposition products

Chlorine
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

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Components:

potassium hydroxide

1310-58-3:

Acute oral toxicity : LD50 (Rat): 273 mg/kg

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

LD50 Oral (Rat, male): 333 mg/kg
Method: OECD Test Guideline 425

sodium hydroxide

1310-73-2:

Acute oral toxicity : LD50 Oral (Rat): 2.000 mg/kg

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

308062-28-4:

Acute oral toxicity : LD50 Oral (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 401

LD50 Oral (Rat): 1.064 mg/kg

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Acute toxicity estimate: 1.064 mg/kg

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

sodium hypochlorite

7681-52-9:

Acute oral toxicity : LD50 (Mouse): 5.800 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 10.000 mg/kg

Skin corrosion/irritation

Product:

Remarks : Extremely corrosive and destructive to tissue.

Components:

potassium hydroxide

1310-58-3:

Result : Corrosive

sodium hydroxide

1310-73-2:

Result : Corrosive

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

308062-28-4:

Species : Rabbit
Method : OECD Test Guideline 404
Result : irritating

Serious eye damage/eye irritation

Product:

Remarks : May cause irreversible eye damage.

Components:

potassium hydroxide

1310-58-3:

Species : Rabbit
Method : OECD Test Guideline 405
Result : Corrosive

sodium hydroxide

1310-73-2:

Result : Corrosive

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Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

308062-28-4:

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

Respiratory or skin sensitization

Product:

Remarks : No data available

Components:

potassium hydroxide

1310-58-3:

Species : Guinea pig
Result : Did not cause sensitization on laboratory animals.

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

308062-28-4:

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitization.

Germ cell mutagenicity

Germ cell mutagenicity : Not Rated

Components:

potassium hydroxide

1310-58-3:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Result: negative

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.

Repeated dose toxicity

Components:

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

308062-28-4:

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Species : Rat, male and female
NOAEL : 88 mg/kg
Method : see user defined free text

Species : Rat, male and female
NOAEL : 88 mg/kg

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:

potassium hydroxide

1310-58-3:

Toxicity to fish : (Pimephales promelas (fathead minnow)): 880 mg/l
Exposure time: 96 h
Test Type: static test

LC50 (Gambusia affinis (Mosquito fish)): 80 mg/l
Exposure time: 96 h

LC50 (Poecilia reticulata (guppy)): 165 mg/l
Exposure time: 24 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 45,4 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 660 mg/l
Exposure time: 48 h
Test Type: static test

EC50 (Ceriodaphnia dubia (water flea)): 40,4 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 : 1.337 mg/l
Exposure time: 120 h

Toxicity to microorganisms : EC50 (Photobacterium phosphoreum): 22 mg/l
Exposure time: 15 min

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Toxicity to soil dwelling organisms : LC50: 850 mg/kg
Exposure time: 90 d

sodium hydroxide

1310-73-2:

Toxicity to fish : LC50 (Fish): 33 - 189 mg/l
Exposure time: 96 h

LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l
Exposure time: 96 h

LC50 (Poecilia reticulata (guppy)): 76 mg/l
Exposure time: 24 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 40,4 mg/l

EC50 (Daphnia magna (Water flea)): 76 mg/l
Exposure time: 24 h

EC50 (Ceriodaphnia (water flea)): 40,4 mg/l
Exposure time: 48 h
Test Type: Immobilization

Toxicity to microorganisms : EC50 (Photobacterium phosphoreum): 22 mg/l
Exposure time: 15 min

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

308062-28-4:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 2,67 mg/l
Exposure time: 96 h

LC50 (Fish): 3,46 mg/l
Exposure time: 96 h

NOEC (Fish): 0,42 mg/l
Exposure time: 302 d
Method: OPPTS 850.1500

Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): 10,4 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

EC50 (Daphnia): 3,1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

NOEC (Daphnia): 0,7 mg/l
Exposure time: 21 d

Toxicity to algae/aquatic plants : EC50 (Scenedesmus capricornutum (fresh water algae)): 0,266 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Scenedesmus capricornutum (fresh water algae)): 0,067 mg/l
Exposure time: 72 h

EC50 (Pseudokirchneriella subcapitata (green algae)): 0,143 mg/l

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Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC10 (*Pseudomonas putida*): 24 mg/l
Exposure time: 18 h

Toxicity to fish (Chronic toxicity) : NOEC: 0,42 mg/l
Exposure time: 302 d
Species: Fish

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,7 mg/l
Exposure time: 21 d
Species: Daphnia
Test Type: Reproduction Test
Method: OECD Test Guideline 211

sodium hypochlorite, sodium hypochlorite (Solution ...%Cl active), sodium hypochlorite (Solution) 7681-52-9:

Toxicity to fish : LC50 (*Pimephales promelas* (fathead minnow)): 1,34 mg/l
Exposure time: 96 h

LC50 (Fish): 0,06 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 0,07 - 0,7 mg/l
Exposure time: 24 h
Test Type: static test

EC50 (*Daphnia magna* (Water flea)): 0,141 mg/l
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 10
10

Toxicity to microorganisms : EC50 (*Photobacterium phosphoreum*): 100 mg/l
Exposure time: 15 min

Toxicity to fish (Chronic toxicity) : NOEC: 0,04 mg/l
Species: *Menidia peninsulae* (tidewater silverside)

M-Factor (Chronic aquatic toxicity) : 1

1

12.2 Persistence and degradability

Components:

potassium hydroxide

1310-58-3:

Biodegradability : Result: Biodegradable
Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

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sodium hydroxide

1310-73-2:

Biodegradability : Result: Biodegradable
Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

308062-28-4:

Biodegradability : Result: rapidly biodegradable
Biodegradation: 90 %
Exposure time: 28 d
Method: OECD 301 B

Chemical Oxygen Demand (COD) : 360 mg/g

Dissolved organic carbon (DOC) : 123 mg/g

12.3 Bioaccumulative potential

Components:

potassium hydroxide

1310-58-3:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

sodium hydroxide

1310-73-2:

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

sodium hypochlorite, sodium hypochlorite (Solution ...%Cl active), sodium hypochlorite (Solution)

7681-52-9:

Partition coefficient: n-octanol/water : log Pow: -3,42

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:

potassium hydroxide

1310-58-3:

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

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12.6 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.

12.7 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic 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.
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 : 3266
IMDG : 3266
IATA : 3266

14.2 UN proper shipping name

ADR : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
(sodium hydroxide, sodium hypochlorite solution)

IMDG : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
(sodium hydroxide,)

IATA : Corrosive liquid, basic, inorganic, n.o.s.
(sodium hydroxide,)

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14.3 Transport hazard class(es)

ADR : 8
IMDG : 8
IATA : 8

14.4 Packing group

ADR
Classification Code : C5
Packaging group : II
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)
IMDG
Packaging group : II
Labels : 8
EmS Number : F-A, S-B
IATA
Packing instruction (cargo aircraft) : 855
Packing instruction (LQ) : Y840
Packaging group : II
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 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

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL	200 000067	500 000067

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HAZARDS

TA Luft List (Germany)	: Total dust: Not applicable : Inorganic substances in powdered form: Not applicable : Inorganic substances in vapor or gaseous form: Not applicable : Organic Substances: Not applicable : Carcinogenic substances: Not applicable : mutagenic: Not applicable : Toxic to reproduction: 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: 3,41 % 442,48 g/l VOC content excluding water
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: 3,41 % 38,53 g/l VOC content valid only for coating materials used on wood surfaces
according to Detergents Regulation EC 648/2004	: <5% phosphonates, non-ionic surfactants, chlorine-based bleaching agents

15.2 Chemical Safety Assessment

SECTION 16: Other information

Full text of H-Statements

H290	: May be corrosive to metals.
H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H315	: Causes skin irritation.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H411	: Toxic to aquatic life with long lasting effects.
EUH031	: Contact with acids liberates toxic gas.

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
Eye Irrit.	: Eye irritation
Met. Corr.	: Corrosive to Metals
Skin Corr.	: Skin corrosion
Skin Irrit.	: Skin irritation
STOT SE	: Specific target organ toxicity - single exposure

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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 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:

Met. Corr. 1	H290
Skin Corr. 1A	H314
Eye Dam. 1	H318
Aquatic Chronic 2	H411

Classification procedure:

Calculation method
On basis of test data.
On basis of test data.
On basis of test data.

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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