



APESIN COMBI DR 2 X 5 L D

WM 0713199

Order number: 0713199

Version 10.0

Revision Date 23.08.2019

Print Date 08.03.2020

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

1.1 Product identifier

Trade name : APESIN COMBI DR 2 X 5 L D
Identification number : 61391

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)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Category 1	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)



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Hazard pictograms



Signal word

: Danger

Hazard statements

: H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

: P102 Keep out of reach of children.
Prevention:
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 + P310 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.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

Safety data sheet available on request.

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous solution of biocides

Hazardous components

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



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N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	2372-82-9 219-145-8 01-2119980592-29	Acute Tox. 3; H301 Skin Corr. 1; H314 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 5 - < 10
Tridecanol, branched, ethoxylated	69011-36-5	Eye Irrit. 2; H319 Aquatic Acute 3; H412	>= 2,5 - < 5
sodium etasulfate	126-92-1 204-812-8 01-2119971586-23	Skin Irrit. 2; H315 Eye Dam. 1; H318 SCL 10 - < 20 % 2; H319 >= 20 % 1; H318	>= 2 - < 3
citric acid	77-92-9 201-069-1 01-2119457026-42	Eye Irrit. 2; H319	>= 1 - < 2

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.
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.
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.



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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

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.
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



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respective authorities.

6.3 Methods and materials 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.

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. 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. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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



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N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
2372-82-9:

: End Use: Workers
Exposure routes: Dermal
Potential health effects: Long-term systemic effects
Value: 0,91 mg/kg

End Use: Consumers
Exposure routes: Dermal
Value: 0,54 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 0,7 mg/m³

End Use: Consumers
Exposure routes: Oral
Value: 0,2 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 2,35 mg/m³

sodium etasulfate
126-92-1:

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 285 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 4060 mg/kg bw/day

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 24 mg/kg bw/day

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 85 mg/m³

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 2440 mg/kg bw/day

PNEC

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
2372-82-9:

: Fresh water
Value: 0,001 mg/l

Soil



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Value: 45,34 mg/kg
Marine sediment
Value: 0,85 mg/kg
Fresh water sediment
Value: 8,5 mg/kg
STP
Value: 1,33 mg/l

sodium etasulfate
126-92-1:
: Fresh water
Value: 0,1357 mg/l
Marine water
Value: 0,0136 mg/l
Fresh water sediment
Value: 1,5 mg/kg
Marine sediment
Value: 0,15 mg/kg
STP
Value: 1,35 mg/l
Soil
Value: 0,22 mg/kg

citric acid
77-92-9:
: Fresh water
Value: 0,44 mg/l
Marine water
Value: 0,044 mg/l
STP
Value: > 1000 mg/l
Fresh water sediment
Value: 34,6 mg/kg
Marine sediment
Value: 3,46 mg/kg
Soil
Value: 33,1 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye protection : Tightly fitting safety goggles



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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

Environmental exposure controls

General advice : 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: colourless
Odour	: amine-like
Odour Threshold	: No data available
pH	: ca. 9,7
Melting point/range	: No data available
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



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Relative vapour density	: No data available
Relative density	: No data available
Density	: ca. 1,031 g/cm 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
Flow time	: 32 s Cross section: 3 mm
Explosive properties	: No data available
Oxidizing properties	: 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

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.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity	: Acute toxicity estimate : 1.466 mg/kg Method: Calculation method
Skin corrosion/irritation	: Extremely corrosive and destructive to tissue.
Serious eye damage/eye irritation	: 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:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

2372-82-9:

Acute oral toxicity	: LD50 Rat, female: 243,6 mg/kg Method: OECD Test Guideline 401 GLP: yes
	LD50 Rat, male: 280 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute dermal toxicity	: LD50 Rat: > 600 mg/kg Method: OECD Test Guideline 402



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Skin corrosion/irritation	: Species: Rabbit Exposure time: 3 min Result: Causes severe burns. Method: OECD Test Guideline 404
Respiratory or skin sensitisation	: Test Method: Buehler Test Species: Guinea pig Result: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 406
Germ cell mutagenicity	
Genotoxicity in vitro	: Test species: Chinese hamster cells Metabolic activation Result: negative Method: OECD Test Guideline 476
	: Type: Chromosome aberration test in vitro Test species: Chinese hamster cells Metabolic activation Result: negative Method: OECD Test Guideline 473
	: Type: Ames test Test species: Salmonella typhimurium Metabolic activation Result: negative Method: OECD Test Guideline 471
Repeated dose toxicity	: Rat: NOAEL: 9 mg/kg Application Route: Oral Exposure time: 90 d Method: OECD Test Guideline 408 GLP: yes Dog: NOAEL: 20 mg/kg Application Route: Dermal Exposure time: 90 d Method: OECD Test Guideline 409 GLP: yes Rat: NOAEL: 15 mg/kg Application Route: Dermal Exposure time: 90 d GLP: yes

Tridecanol, branched, ethoxylated



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69011-36-5:

- Acute oral toxicity : LD50 Oral Rat: > 500 mg/kg
LD50 Oral Rat: < 2.000 mg/kg
LD50 Oral Rat: > 500 - 2.000 mg/kg
Method: OECD Test Guideline 423
- Skin corrosion/irritation : Species: Rabbit
Result: Mild skin irritation
Method: OECD Test Guideline 404
- Serious eye damage/eye irritation : Species: Rabbit
Result: irritating
Method: OECD Test Guideline 405

sodium etasulfate

126-92-1:

- Acute oral toxicity : LD50 Oral Rat, male and female: 2.840 mg/kg
- Acute dermal toxicity : LD50 Dermal Rat, male and female: > 2.000 mg/kg
- Skin corrosion/irritation : Species: Rabbit
Result: Skin irritation
- Serious eye damage/eye irritation : Species: Rabbit
Result: Eye irritation

citric acid

77-92-9:

- Acute oral toxicity : LD50 Oral Mouse: 5.400 mg/kg
Method: OECD Test Guideline 401
LD50 Oral Rat: 11.700 mg/kg
Method: OECD Test Guideline 401
LD50 Oral Mouse: 5.000 mg/kg
LD50 Oral Rat: 3.000 mg/kg
- Acute dermal toxicity : LD50 Dermal Rat: > 2.000 mg/kg
Method: OECD Test Guideline 402
- Acute toxicity (other routes of administration) : see user defined free text Rat: 725 mg/kg
Application Route: see user defined free text



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	see user defined free text Mouse: 940 mg/kg Application Route: see user defined free text
Serious eye damage/eye irritation	: Result: Eye irritation
Respiratory or skin sensitisation	: Result: Does not cause skin sensitisation.
Carcinogenicity - Assessment	: Not classifiable as a human carcinogen.
Repeated dose toxicity	: Rat: NOAEL: 4.000 mg/kg LOAEL: 8.000 mg/kg Application Route: Oral Exposure time: 10 d

SECTION 12: Ecological information

12.1 Toxicity

Components:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

2372-82-9:

Toxicity to fish	: LC50 (Danio rerio (zebra fish)): 0,44 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 LC50 (Oncorhynchus mykiss (rainbow trout)): 0,68 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 GLP: yes LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,45 mg/l Exposure time: 96 h Analytical monitoring: yes GLP: yes
Toxicity to daphnia and other aquatic invertebrates	: EC0 (Daphnia magna (Water flea)): 0,3 mg/l Exposure time: 24 h Method: OECD Test Guideline 202 EC50 (Daphnia magna (Water flea)): 0,073 mg/l Exposure time: 48 h Test Type: Immobilization Analytical monitoring: yes GLP: yes NOEC (Daphnia magna (Water flea)): 0,024 mg/l Exposure time: 21 d Test Type: Reproduction Test Analytical monitoring: yes



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	Method: OECD Test Guideline 211 GLP: yes
Toxicity to algae	: ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,054 mg/l Exposure time: 96 h Test Type: Growth inhibition GLP: yes
	ErC10 (Desmodesmus subspicatus (green algae)): 0,012 mg/l Exposure time: 72 h Test Type: Growth inhibition Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
	(Desmodesmus subspicatus (green algae)): 0,0069 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201
M-Factor (Short-term (acute) aquatic hazard)	: 10
Toxicity to bacteria	: EC50 (Bacteria): 0,8 mg/l Method: DIN 38412 GLP:
	EC50 (activated sludge): 18 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209 GLP: yes
M-Factor (Long-term (chronic) aquatic hazard)	: 1
Tridecanol, branched, ethoxylated 69011-36-5:	
Toxicity to fish	: LC50 (Leuciscus idus (Golden orfe)): 1 - 10 mg/l Exposure time: 96 h Method: DIN 38412
	LC50 (Brachydanio rerio (zebrafish)): 12 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1 - < 10 mg/l Exposure time: 48 h
	EC50 (Daphnia magna (Water flea)): 4,7 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
	NOEC (Daphnia magna (Water flea)): 2,5 mg/l



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Toxicity to algae	: EC50 (Scenedesmus subspicatus): > 1 - < 10 mg/l Exposure time: 72 h Test Type: Growth inhibition EC10 : > 1 mg/l Exposure time: 72 h EC50 (Desmodesmus subspicatus (green algae)): 17 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to bacteria	: EC10 (activated sludge): > 2.500 mg/l Exposure time: 17 h Method: DIN 38 412 Part 8
Toxicity to fish (Chronic toxicity)	: NOEC: > 1 mg/l Species: Fish
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: > 1 mg/l
sodium etasulfate	
126-92-1:	
Toxicity to fish	: LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia (water flea)): > 100 mg/l Exposure time: 48 h
Toxicity to algae	: EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h
Toxicity to bacteria	: EC50 (activated sludge): > 100 mg/l Exposure time: 3 h
Toxicity to fish (Chronic toxicity)	: NOEC: \geq 1.357 mg/l Exposure time: 42 d Species: Pimephales promelas (fathead minnow)
citric acid	
77-92-9:	
Toxicity to fish	: LC50 (Leuciscus idus (Golden orfe)): 440 - 760 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 1.535 mg/l Exposure time: 24 h EC50 (Daphnia magna (Water flea)): ca. 120 mg/l Exposure time: 72 h
Toxicity to algae	: NOEC (Scenedesmus quadricauda (Green algae)): 425 mg/l Exposure time: 8 Days



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Toxicity to bacteria : Test Type: static test
(Pseudomonas putida): > 10.000 mg/l
Exposure time: 16 h

12.2 Persistence and degradability

Components:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

2372-82-9:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301

Test Type: Zahn-Wellens Test
Biodegradation: 91 %
Exposure time: 28 d
Method: OECD Test Guideline 302B

Test Type: see user defined free text
Result: rapidly biodegradable
Biodegradation: 79 %
Exposure time: 28 d
Method: OECD 301 D
GLP: yes

Biodegradation: 96 %
Exposure time: 12 - 15 d
Method: OECD Test Guideline 303A

Chemical Oxygen Demand (COD) : 2.875 mg/g
Remarks: see user defined free text

Dissolved organic carbon (DOC) : 721 mg/g
Remarks: see user defined free text

Tridecanol, branched, ethoxylated

69011-36-5:

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

Result: rapidly biodegradable
Biodegradation: > 60 %
Method: OECD 301 B

Result: rapidly biodegradable
Biodegradation: > 90 %
Exposure time: 28 d
Method: OECD 301 D

Chemical Oxygen Demand (COD) : 2.438 mg/g



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sodium etasulfate

126-92-1:

Biodegradability : Biodegradation: > 60 %
Exposure time: 14 d
Method: OECD 301 D
Remarks: The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Biodegradation: 89 %
Exposure time: 28 d
Method: OECD 301 B

Biochemical Oxygen Demand (BOD) : 342 mg/g
Incubation time: 5 d
Method: see user defined free text

Chemical Oxygen Demand (COD) : 578 mg/g
Method: DIN 38409-H-41

citric acid

77-92-9:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 97 %
Exposure time: 28 d
Method: OECD 301 B

Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 19 d
Method: OECD 301 E

Biochemical Oxygen Demand (BOD) : 526 mg/g

Chemical Oxygen Demand (COD) : 728 mg/g

ThOD : 0,75 g/g

12.3 Bioaccumulative potential

Components:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

2372-82-9:

Partition coefficient: n-octanol/water : log Pow: 4,46
Remarks: see user defined free text

citric acid

77-92-9:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.



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Partition coefficient: n-octanol/water : log Pow: -1,72

12.4 Mobility in soil

Components:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

2372-82-9:

Mobility : Remarks: After release, adsorbs onto soil.

12.5 Results of PBT and vPvB assessment

Components:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

2372-82-9:

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

citric acid

77-92-9:

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

12.6 Other adverse effects

Product:

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

Components:

2372-82-9:

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

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.



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SECTION 14: Transport information

14.1 UN number

ADR : 1760
IMDG : 1760
IATA : 1760

14.2 Proper shipping name

ADR : CORROSIVE LIQUID, N.O.S.
(N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine)
IMDG : CORROSIVE LIQUID, N.O.S.
(N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine)
IATA : Corrosive liquid, 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 : C9
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
(Cargo) : Corrosive liquid, n.o.s. Not permitted for transport
Packaging group : II
Labels : 8

14.5 Environmental hazards

ADR
Environmentally hazardous : yes

IMDG
Marine pollutant : yes
IATA
Environmentally hazardous : yes

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.



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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) : 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
E1	ENVIRONMENTAL HAZARDS	100 000067	200 000067

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: 8,66 %
: 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 emissions (integrated pollution prevention and control)
Update: Not applicable

according to Detergents Regulation EC 648/2004 : <5% Anionic surfactants, Non-ionic surfactants, LAURYLAMINE
DIPROPYLENEDIAMINE

GISBAU (D) : GD 40

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.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.



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H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further information

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

Classification procedure:	H302	Calculation method
	H314	Calculation method
	H318	Calculation method
	H400	Calculation method
	H411	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 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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