

SAFETY DATA SHEET

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



APESIN OXYDES

WM 1212850

Order number: 0712850

Version 3.2

Revision Date 15.07.2026

Print Date 16.07.2026

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

1.1 Product identifier

Trade name : APESIN OXYDES
UFI : ADJ4-X0GA-A000-HN52

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)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H312: Harmful in contact with skin.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Skin corrosion, Sub-category 1A	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Specific target organ toxicity - single exposure, Category 3	H335: May cause respiratory irritation.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.
Corrosive to Metals, Category 1	H290: May be corrosive to metals.

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2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word :

Danger

Hazard Statements :

H290 May be corrosive to metals.
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements :

EUH071 Corrosive to the respiratory tract.

Precautionary Statements :

P102 Keep out of reach of children.
Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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 or doctor/ physician.
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:

acetic acid
peracetic acid
hydrogen peroxide

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.

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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. Index-No. Registration number	Classification	Concentration (% w/w)
hydrogen peroxide	7722-84-1 231-765-0 008-003-00-9 01-2119485845-22	Ox. Liq. 1; H271 Acute Tox. 4; H332 Acute Tox. 4; H302 Skin Corr. 1A; H314 STOT SE 3; H335 Eye Dam. 1; H318 Aquatic Chronic 3; H412 specific concentration limit Ox. Liq. 1; H271 ≥ 70 % Ox. Liq. 2; H272 50 - < 70 % Skin Corr. 1A; H314 ≥ 70 % Skin Corr. 1B; H314 50 - < 70 % Skin Irrit. 2; H315 35 - < 50 % Eye Dam. 1; H318 ≥ 8 % Eye Irrit. 2; H319 5 - < 8 % STOT SE 3; H335 ≥ 35 % Aquatic Chronic 3; H412 ≥ 63 % Acute toxicity estimate Acute oral toxicity: 500 mg/kg Acute inhalation toxicity	≥ 25 - < 30

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		(dust/mist): 3,0 - 4,3 mg/l	
		Acute dermal toxicity: > 2.000 mg/kg	
acetic acid	64-19-7 200-580-7 607-002-00-6 01-2119475328-30	Flam. Liq. 3; H226 Skin Corr. 1A; H314 Eye Dam. 1; H318 specific concentration limit Skin Corr. 1A; H314 ≥ 90 % Skin Corr. 1B; H314 25 - < 90 % Skin Irrit. 2; H315 10 - < 25 % Eye Irrit. 2; H319 10 - < 25 % Eye Dam. 1; H318 ≥ 25 %	≥ 5 - < 10
peracetic acid	79-21-0 201-186-8 607-094-00-8	Flam. Liq. 3; H226 Org. Perox. D; H242 Skin Corr. 1A; H314 Aquatic Acute 1; H400 Acute Tox. 2; H330 Acute Tox. 2; H310 Acute Tox. 3; H301 Eye Dam. 1; H318 Aquatic Chronic 1; H410 specific concentration limit STOT SE 3; H335 ≥ 1 % Acute toxicity estimate Acute oral toxicity: 500 mg/kg Acute dermal toxicity: 1.100 mg/kg	≥ 5 - < 10

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.

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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
Irritation

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 : Water
ABC powder
Foam
Carbon dioxide (CO₂)

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

5.2 Special hazards arising from the substance or mixture

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

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

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

Further information : Use water spray to cool unopened containers.
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.

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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.

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 chalk, alkali solution or ammonia.
Keep in suitable, closed containers for disposal.
Never neutralize with the following products:
Sawdust

Neutralize with chalk, alkali solution or ammonia.
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 : Do not keep container sealed.
For personal protection see section 8.
Open drum carefully as content may be under pressure.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.

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.

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Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Avoid formation of aerosol. Keep away from combustible material.

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.

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.

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

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

Substance name	End Use	Routes of exposure	Potential health effects	Value
hydrogen peroxide, hydrogen peroxide (Equal to or > 52% by weight), hydrogen peroxide (Solution)	Workers	Inhalation	Acute local effects	3 mg/m ³
	Workers	Inhalation	Long-term local effects	1,4 mg/m ³
	Consumers	Inhalation	Acute local effects	1,93 mg/m ³
	Consumers	Inhalation	Long-term local effects	0,21 mg/m ³
acetic acid, acetic acid (Solution)	Consumers	Inhalation	Acute local effects	25 mg/m ³

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	Consumers	Inhalation	Long-term local effects	25 mg/m3
	Workers	Inhalation	Acute local effects	25 mg/m3
	Workers	Inhalation	Long-term local effects	25 mg/m3

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

Substance name	Environmental Compartment	Value
hydrogen peroxide, hydrogen peroxide (Equal to or > 52% by weight), hydrogen peroxide (Solution)	Sea water	0,0126 mg/l
	Fresh water	0,0126 mg/l
	Soil	0,0023 mg/kg dry weight (d.w.)
	intermittent release	0,0138 mg/l
	STP	4,66 mg/l
	Fresh water sediment	0,047 mg/kg dry weight (d.w.)
	Sea sediment	0,047 mg/kg dry weight (d.w.)
acetic acid, acetic acid (Solution)	Sea water	0,3058 mg/l
	Soil	0,470 mg/kg
	Sea sediment	1,136 mg/kg
	Fresh water sediment	11,36 mg/kg
	Fresh water	3,058 mg/l
	STP	30,58 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection

Material : PVC

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Material	:	Neoprene
Material	:	butyl-rubber
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 Ensure adequate ventilation, especially in confined areas. Not required; except in case of aerosol formation. Recommended Filter type: ABEK-P3-filter

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Color	:	colorless
Odor	:	stinging
Melting point/freezing point	:	-28 °C

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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	: > 110 °C
Ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: 0,5, 100 % at 20 °C
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Water solubility	: completely soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Vapor pressure	: 31,997 hPa at 25 °C
Density	: 1,12 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.

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 : Reducing agents
Bases
Protect from frost, heat and sunlight.

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Heat.

10.5 Incompatible materials

Materials to avoid : Metals
Flammable materials
Organic materials

No data available

10.6 Hazardous decomposition products

Oxygen
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: 1.489 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 7,43 mg/l
Test atmosphere: vapor
Method: Calculation method

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

Components:

hydrogen peroxide

7722-84-1:

Acute oral toxicity : LD50 (Rat): 1.193 - 1.270 mg/kg
LD50 (Rat): 418 - 445 mg/kg
Acute toxicity estimate: 500 mg/kg
Method: Converted acute toxicity point estimate

Acute inhalation toxicity : LC50 (Rat): 0,17 mg/l
Exposure time: 4 h
LC50 (Rat): 2 mg/l
Exposure time: 4 h
Acute toxicity estimate: 3,0 - 4,3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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Method: Calculation method

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

Acute toxicity (other routes of administration) : (Mouse): 100 mg/kg

acetic acid

64-19-7:

Acute oral toxicity : LD50 Oral (Rat): 3.310 mg/kg

Acute inhalation toxicity : LC50 (Rat): 40 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 1.060 mg/kg

peracetic acid

79-21-0:

Acute oral toxicity : LD50 (Rat): 330 mg/kg

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

LD50 (Rat, male and female): 85 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 0,204 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : Acute toxicity estimate: 1.100 mg/kg
Method: Converted acute toxicity point estimate
LD50 (Rabbit, male and female): 228,8 mg/kg

Skin corrosion/irritation

Product:

Remarks : Extremely corrosive and destructive to tissue.

Components:

hydrogen peroxide

7722-84-1:

Species : Rabbit
Result : Skin irritation

acetic acid

64-19-7:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Causes severe burns.

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Serious eye damage/eye irritation

Product:

Remarks : May cause irreversible eye damage.
Liquid causes strong irritation to the mucous membrane and severe damage to the cornea.

Remarks : May cause irreversible eye damage.

Components:

hydrogen peroxide

7722-84-1:

Species : Rabbit
Result : Causes serious eye damage.

acetic acid

64-19-7:

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

peracetic acid

79-21-0:

Species : Rabbit
Assessment : Risk of serious damage to eyes.

Respiratory or skin sensitization

Product:

Remarks : No data available

Components:

hydrogen peroxide

7722-84-1:

Result : Did not cause sensitization on laboratory animals.

acetic acid

64-19-7:

Result : Did not cause sensitization on laboratory animals.

peracetic acid

79-21-0:

Species : Guinea pig
Assessment : Did not cause sensitization on laboratory animals.
Method : OECD Test Guideline 406

Germ cell mutagenicity

Germ cell mutagenicity : Not Rated

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Components:

acetic acid

64-19-7:

Genotoxicity in vivo : Method: OECD Test Guideline 474
Remarks: negative

Carcinogenicity : Not Rated

Reproductive toxicity : Not Rated

STOT-single exposure

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

Components:

peracetic acid

79-21-0:

Target Organs : Lungs
Assessment : May cause respiratory irritation.

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

Repeated dose toxicity

Components:

hydrogen peroxide

7722-84-1:

Species : Rat
NOAEL : 2 mg/kg
Application Route : inhalation (vapor)
Exposure time : 28 d

Species : Mouse, male and female
NOAEL : 26 - 37 mg/kg
Application Route : Oral
Exposure time : 90 d

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.

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Further information

Product:

Remarks : Ingestion causes burns of the upper digestive and respiratory tracts.

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

hydrogen peroxide, hydrogen peroxide (Equal to or > 52% by weight), hydrogen peroxide (Solution)

7722-84-1:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 16,4 mg/l
Exposure time: 96 h
Test Type: semi-static test

LC50 (Leuciscus idus (Golden orfe)): 35 mg/l
Exposure time: 24 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 31 mg/l
Exposure time: 24 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,4 mg/l
Exposure time: 48 h
Test Type: semi-static test

EC50 (Daphnia magna (Water flea)): 7,7 mg/l
Exposure time: 24 h

EC50 (Daphnia pulex (Water flea)): 2,4 mg/l
Exposure time: 48 h
Test Type: semi-static test

NOEC (Daphnia magna (Water flea)): 0,63 mg/l
Exposure time: 21 h

Toxicity to algae/aquatic plants : ErC50 (Skeletonema costatum (marine diatom)): 1,38 mg/l
Exposure time: 72 h
Test Type: Growth inhibition

(Chlorella vulgaris (Fresh water algae)): 4,3 mg/l
Exposure time: 72 h
Test Type: Growth inhibition

EC50 (Scenedesmus quadricauda (Green algae)): 27,5 - 43 mg/l
Exposure time: 240 h

NOEC (Skeletonema costatum (marine diatom)): 0,63 mg/l
Exposure time: 72 h
Test Type: static test

IC50 (Chlorella vulgaris (Fresh water algae)): 2,5 mg/l
Exposure time: 72 h

NOEC (Chlorella vulgaris (Fresh water algae)): 0,1 mg/l

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- Exposure time: 72 h
- Toxicity to microorganisms : EC10 (*Pseudomonas putida*): 11 mg/l
Exposure time: 16 h
- EC50 (activated sludge): 466 mg/l
Exposure time: 30 min
Method: OECD Test Guideline 209
- EC50 (activated sludge): > 1.000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,63 mg/l
Exposure time: 21 d
Species: *Daphnia magna* (Water flea)

acetic acid, acetic acid (Solution)

64-19-7:

- Toxicity to fish : LC50 (*Lepomis macrochirus* (Bluegill sunfish)): 75 mg/l
Exposure time: 96 h
- LC50 (*Leuciscus idus* (Golden orfe)): 410 mg/l
Exposure time: 48 h
- LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 300,82 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- LC50 (*Pimephales promelas* (fathead minnow)): 88 mg/l
Exposure time: 96 h
- LC50 (Fish): > 1.000 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 300,82 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- EC50 (*Daphnia magna* (Water flea)): 47 - 95 mg/l
Exposure time: 24 h
- LC50 (*Daphnia magna* (Water flea)): 95 mg/l
Exposure time: 24 h
- Toxicity to algae/aquatic plants : EC50 (*Skeletonema costatum* (marine diatom)): > 300,82 mg/l
Exposure time: 72 h
- IC50 (*Scenedesmus quadricauda* (Green algae)): 4.000 mg/l
Exposure time: 16 h
- Toxicity to microorganisms : EC10 (*Pseudomonas putida*): 1.000 mg/l
Exposure time: 30 min
- peracetic acid, peracetic acid (Solution)**
- 79-21-0:**
- Toxicity to fish : (*Lepomis macrochirus* (Bluegill sunfish)): 1,1 mg/l
Exposure time: 96 h

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Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0,5 mg/l Exposure time: 48 h Method: DIN 38412 EC50 (Daphnia magna (Water flea)): 0,73 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	: (Pseudokirchneriella subcapitata (green algae)): 0,16 mg/l Exposure time: 72 h
Toxicity to microorganisms	: EC50 (activated sludge): 5,1 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
Toxicity to fish (Chronic toxicity)	: NOEC: 0,00069 mg/l Exposure time: 33 d Species: Danio rerio (zebra fish) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0,0121 mg/l Exposure time: 21 d Method: OECD Test Guideline 211

12.2 Persistence and degradability

Components:

hydrogen peroxide, hydrogen peroxide (Equal to or > 52% by weight), hydrogen peroxide (Solution)

7722-84-1:

Biodegradability	: Test Type: aerobic Inoculum: activated sludge Result: rapidly biodegradable Exposure time: < 2 min Test Type: aerobic Inoculum: see user defined free text Result: rapidly biodegradable Exposure time: 0,3 - 5 d Test Type: anaerobic Inoculum: see user defined free text Remarks: Not applicable
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acetic acid, acetic acid (Solution)

64-19-7:

Biodegradability	: Result: Readily biodegradable. Biodegradation: 96 % Exposure time: 20 d Result: rapidly biodegradable Biodegradation: 95 % Exposure time: 5 d
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peracetic acid, peracetic acid (Solution)

79-21-0:

Biodegradability	: Result: rapidly biodegradable Exposure time: 28 d Method: OECD 301 E
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12.3 Bioaccumulative potential

Components:

hydrogen peroxide, hydrogen peroxide (Equal to or > 52% by weight), hydrogen peroxide (Solution)

7722-84-1:

Bioaccumulation : Remarks: Does not bioaccumulate.

acetic acid, acetic acid (Solution)

64-19-7:

Bioaccumulation : Bioconcentration factor (BCF): 3,16
Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: -0,17

peracetic acid, peracetic acid (Solution)

79-21-0:

Bioaccumulation : Bioconcentration factor (BCF): 1

Partition coefficient: n-octanol/water : log Pow: -1,09

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:

acetic acid, acetic acid (Solution)

64-19-7:

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

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.
Very toxic to aquatic life with long lasting effects.

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

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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	: 3265
IMDG	: 3265
IATA	: 3265

14.2 UN proper shipping name

ADR	: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Peroxyacetic acid, hydrogen peroxide)
IMDG	: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Peroxyacetic acid, hydrogen peroxide)
IATA	: Corrosive liquid, acidic, organic, n.o.s.

14.3 Transport hazard class(es)

ADR	: 8
IMDG	: 8
IATA	: 8

14.4 Packing group

ADR	
Classification Code	: C3
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, acidic, organic, n.o.s.
Packaging group	: II

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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.

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) : 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.

		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 vapor or gaseous form: Not applicable
- Organic Substances: portion Class 2: 8 %
- 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: 34 %

according to Detergents Regulation EC 648/2004 : 15 - <30% oxygen-based bleaching agents, <5% phosphonates

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Other regulations : Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/crisis-and-terrorism/explosives/explosives-precursors/docs/list_of_competent_authorities_and_national_contact_points_en.pdf.

15.2 Chemical Safety Assessment

SECTION 16: Other information

Full text of H-Statements

H226 : Flammable liquid and vapor.
H242 : Heating may cause a fire.
H271 : May cause fire or explosion; strong oxidizer.
H301 : Toxic if swallowed.
H302 : Harmful if swallowed.
H310 : Fatal in contact with skin.
H314 : Causes severe skin burns and eye damage.
H318 : Causes serious eye damage.
H330 : Fatal if inhaled.
H332 : Harmful if inhaled.
H335 : May cause respiratory irritation.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Dam. : Serious eye damage
Flam. Liq. : Flammable liquids
Org. Perox. : Organic peroxides
Ox. Liq. : Oxidizing liquids
Skin Corr. : Skin corrosion
STOT SE : Specific target organ toxicity - single exposure

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

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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:

Acute Tox. 4	H302
Acute Tox. 4	H312
Acute Tox. 4	H332
Skin Corr. 1A	H314
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Chronic 1	H410
Met. Corr. 1	H290

Classification procedure:

On basis of test data.
On basis of test data.
On basis of test data.
On basis of test data.
On basis of test data.
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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