SYSTEM OXYBLEACH

WM 0714777 **Order number: 0714777**

Version 4.1 Revision Date 22.01.2026 Print Date 11.03.2026

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

1.1 Product identifier

Trade name	:	SYSTEM OXYBLEACH
UFI	:	4XK5-S02S-D00K-710H

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

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

1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone

EU: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Organic peroxides, Type G

Corrosive to Metals, Category 1	H290: May be corrosive to metals.
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, Category 1B	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.

Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very 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.
H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
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:	
P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P264	Wash face, hands and any exposed skin thoroughly after handling.
P273	Avoid release to the environment.
Response:	
P303 + P361 + P353 + P310	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
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.

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	>= 25 - < 30

		Acute oral toxicity: 500 mg/kg Acute inhalation toxicity (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 --- 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 %	>= 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.

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 spray jet
Alcohol-resistant foam
Dry powder
Carbon dioxide (CO2)
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

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.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapors accumulating to form explosive concentrations.
Vapors can accumulate in low areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
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.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Unsuitable material for picking up:
Sawdust

Neutralize with chalk, alkali solution or ammonia.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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.
Do not keep container sealed.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Container may be opened only under exhaust ventilation hood.
Open drum carefully as content may be under pressure.
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.
Take precautionary measures against static discharges.
Container may be opened only under exhaust ventilation hood.
Open drum carefully as content may be under pressure.
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 : Avoid formation of aerosol. Keep away from combustible material. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Avoid formation of aerosol. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

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. Electrical installations / working materials must comply with the technological safety standards. Store at room temperature in the original container.

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Cleaning agent

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Routes of exposure	Potential health effects	Value
hydrogen peroxide, hydrogen peroxide (Equal to or > 52% by weight), hydrogen peroxide (Solution)	Workers	Inhalation	Acute local effects	3 mg/m3
	Workers	Inhalation	Long-term local effects	1,4 mg/m3

	Consumers	Inhalation	Acute local effects	1,93 mg/m3
	Consumers	Inhalation	Long-term local effects	0,21 mg/m3
acetic acid, acetic acid (Solution)	Consumers	Inhalation	Acute local effects	25 mg/m3
	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
	intermittent release	30,58 mg/l
	STP	85 mg/l
	Water	30,58 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection	:	Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
		Tightly fitting safety goggles
Hand protection		
Material	:	Natural Rubber
Break through time	:	> 480 min
Glove length	:	0,22 mm
Material	:	Chloroprene
Break through time	:	> 480 min
Glove length	:	0,65 mm
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. Ensure adequate ventilation, especially in confined areas. Recommended Filter type: ABEK-P3-filter

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

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, vinegar-like
Melting point/freezing point	:	-28 °C
Boiling point/boiling range	:	>= 60 °C
Flammability (solid, gas)	:	No data available
Flammability (liquids)	:	No data available
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Flash point	:	does not flash
Ignition temperature	:	435 °C Method: DIN 51794
Decomposition temperature	:	>= 60 °C
pH	:	ca. 0,2, 100 % at 20 °C
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	1,208 mm2/s at 20 °C
		0,814 mm2/s at 40 °C
Water solubility	:	completely soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	log Pow: -0,26 at 20 °C pH: 7

Vapor pressure	:	31,997 hPa at 25 °C
Density	:	ca. 1,12 g/cm3 at 20 °C
Relative density	:	No data available
Relative vapor density	:	No data available
Particle characteristics	:	No data available

9.2 Other information

Surface tension	:	54,44 mN/m, 20 °C
Evaporation rate	:	No data available
Burning rate	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

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.
Vapors may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.
Reducing agents
Bases
Avoid contact with combustible material (paper, wool, oil).
Strong sunlight for prolonged periods.

Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Flammable materials
Organic materials
Metals

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	:	LD50 Oral (Rat, female): 1.859 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat, male and female): 4,08 mg/l Exposure time: 4 h Test atmosphere: vapor
Acute dermal toxicity	:	LD50 Dermal (Rabbit, male and female): 1.147 mg/kg

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 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 (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.

Serious eye damage/eye irritation

Product:

Remarks : Extremely corrosive and destructive to tissue.
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:

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

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

Product:

Species	:	Rat, male and female
NOAEL	:	1,17 mg/kg
Application Route	:	Oral
Exposure time	:	92 - 93 d
Method	:	OECD Test Guideline 408

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.

Further information

Product:

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 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

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

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

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

peracetic acid, peracetic acid (Solution)
79-21-0:

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

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).

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 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.
Do not burn, or use a cutting torch on, the empty drum.

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	:	3149
IMDG	:	3149
IATA	:	3149

14.2 UN proper shipping name

ADR	:	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
IMDG	:	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
IATA	:	Hydrogen peroxide and peroxyacetic acid mixture stabilized

14.3 Transport hazard class(es)

ADR	:	5.1
IMDG	:	5.1
IATA	:	5.1

14.4 Packing group

ADR		
Classification Code	:	OC1
Packaging group	:	II
Hazard Identification Number	:	58
Labels	:	5.1 (8)
Tunnel restriction code	:	(E)
IMDG		
Packaging group	:	II
Labels	:	5.1 (8)
EmS Number	:	F-H, S-Q
IATA		
(Cargo)	:	Hydrogen peroxide and peroxyacetic acid mixture stabilized
Packaging group	:	II
Labels	:	5.1 (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, preparations and articles (Annex XVII) : Not applicable

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

		Quantity 1	Quantity 2
P6b	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES	50 000067	200 000067
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: : portionClass 2: 6,6 %
: 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: 31,6 %
1.228,18 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: 31,6 %
353,92 g/l
VOC content valid only for coating materials used on wood surfaces

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

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

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:		**Classification procedure:**
Org. Perox. G		On basis of test data.
Met. Corr. 1	H290	Based on product data or assessment
Acute Tox. 4	H302	On basis of test data.
Acute Tox. 4	H312	On basis of test data.
Acute Tox. 4	H332	On basis of test data.
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	On basis of test data.
STOT SE 3	H335	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

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

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