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AQUABIG LIQUID

MATERIAL SAFETY DATA SHEET

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1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY UNDERTAKING

PRODUCT NAME

AQUABIG LIQUID

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

For professional use only.

Type of biocide preparation

Liquid mixture concentrated

Product-type

TP5, Drinking water disinfectant.

Product-type 2

TP2, Private area and public health area disinfectants and other biocidal products.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

RS Hygiene Ltd, The Street, Worlington, Suffolk IP28 728 Tel: 03331230202

2 HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

IN COMPLIANCE WITH EC REGULATION NO. 1272/2008 AND ITS AMENDMENTS.

ACUTE ORAL TOXICITY, CATEGORY 4 (ACUTE TOX. 4, H302).

ACUTE INHALATION TOXICITY, CATEGORY 4 (ACUTE TOX. 4, H332).

SERIOUS EYE DAMAGE, CATEGORY 1 (EYE DAM. 1, H318).

SKIN SENSITISATION, CATEGORY 1 (SKIN SENS. 1, H317).

CARCINOGENICITY, CATEGORY 2 (CARC. 2, H351).

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE), CATEGORY 2 (STOT RE 2, H373).

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD, CATEGORY 2 (AQUATIC CHRONIC 2, H411).

THIS MIXTURE DOES NOT PRESENT A PHYSICAL HAZARD. REFER TO THE RECOMMENDATIONS REGARDING THE OTHER PRODUCTS PRESENT ON THE SITE.

2.2. LABEL ELEMENTS

Biocidal mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms



Signal Word:

DANGER

Product identifiers :

EC 231-765-0

CAS 27083-27-8

EC 200-573-9

EC 308-783-3

Precautionary statements

H302 + H332

H317

H318

H351

H373

H411

Precautionary statements - Prevention :

P201

P221

P273

P280

HYDROGEN PEROXIDE SOLUTION
POLY(HEXAMETHYLENEBIGUANIDE)HYDROCHLORIDE
TETRA SODIUM ETHYLENE DIAMINE TETRAACETATE
UNDECYLENAMIDO PROPYL BETA NE

Harmful if swallowed or if inhaled.

May cause an allergic skin reaction.

Causes serious eye damage.

Suspected of causing cancer .

May cause damage to organs through prolonged or repeated exposure (if inhaled).

Toxic to aquatic life with long lasting effects.

Obtain special instructions before use.

Take any precaution to avoid mixing with combustibles...

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.



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Precautionary statements -

P305 + P351 + P338

P310

P333 + P313

Precautionary statements - Disposal :

P501

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regs EC1907/2006.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 7722-84-1	GHS07, GHS05, GHS03	B	25 \leq x % < 50
EC: 231-765-0	Dgr	(1)	
REACH: 01-2119485845-xxxx	Ox. Liq. 1, H271		
	Acute Tox. 4, H302		
HYDROGEN PEROXIDE SOLUTION	Skin Corr. 1A, H314		
	Acute Tox. 4, H332		
	STOT SE3, H335		
	Aquatic Chronic 3, H412		
CAS: 27083-27-8	GHS06, GHS05, GHS09, GHS08	[2]	2.5 \leq x % < 10
	Dgr		
POLY(HEXAMETHYLENEBIGUAINIDE)	Acute Tox. 4, H302		
HYDROCHLORIDE	Skin Sens. 1, H317		
	Eye Dam. 1, H318		
	Acute Tox. 2, H330		
	Carc. 2, H351		
	STOT RE 1, H372		
	Aquatic Acute 1, H400		
	M Acute = 1		
	Aquatic Chronic 1, H410		
	M Chronic = 1		
CAS: 77-92-9	GHS07		2.5 \leq x % < 10
EC: 201-069-1	Wng		
REACH: 02-2119773813-30-xxxx	Eye Irrit. 2, H319		
CITRIC ACID			
CAS: 6419-19-8	GHS05		2.5 \leq x % < 10
EC: 229-146-5	Wng		
	Met. Corr. 1, H290		
NITRILOTRIMETHYLENETRIS(PHOSPHONIC ACID)	Eye Irrit. 2, H319		
CAS: 64-02-8	GHS07, GHS05		0 \leq x % < 2.5
EC: 200-573-9	Dgr		
	Acute Tox. 4, H302		
TETRASODIUM ETHYLENE DIAMINE	Eye Dam. 1, H318		
TETRAACETATE	Acute Tox. 4, H332		
CAS: 98510-75-9	GHS05		0 \leq x % < 2.5
EC: 308-783-3 D gr			
	Eye Dam. 1, H318		
UNDECYLENAMIDO PROPYL BETAINE			

Response

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/...

If skin irritation or rash occurs: Get medical advice/attention.

Dispose of material and its container as an hazardous waste.



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Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.

In the event of splashes or contact with eyes :

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

Seek medical attention immediately, showing the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Information for the doctor :

The formulation is declared at the poison control center of Nancy, France and INRS.

SECTION 5 : FIREFIGHTING MEASURES

Non flammable

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- multipurpose ABC powder
- sprayed water or water mist
- foam

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker



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Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Neutralise with an alkaline decontaminant, such as an aqueous solution of sodium carbonate or similar.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Showers and Eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid eye contact with this mixture at all times.

Avoid exposure - obtain special instructions before use.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used. **Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture at all times.

Avoid exposure - obtain special instructions before use.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Packaging

Always keep in packaging made of an identical material to the original.

Recommended types of packaging :

- Vats - Drums

Suitable packaging materials :

- Polyethylene

Unsuitable packaging materials :



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- Metal

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA	STEL	Ceiling	Definition	Criteria :
7722-84-1	1 ppm	-	-	-	-

France (INRS - ED984 :2008) :

CAS	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes	TM P No :
7722-84-1	1	1.5	-	-	-	-

UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA	STEL	Ceiling	Definition	Criteria :
7722-84-1	1 ppm	2 ppm	-	-	-

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Final use

Exposure method
Potential health effects
DNEL
Exposure method I
Potential health effects
DNEL

Workers.

Inhalation.
Short term systemic effects.
2.8 mg of substance/m3
Inhalation.
Short term local effects.
2.8 mg of substance/m3

Final use

Exposure method
Potential health effects
DNEL
Exposure method
Potential health effects
DNEL

Consumers.

Ingestion.
Long term systemic effects.
28 mg/kg body weight/day
Inhalation.
Short term systemic effects.
1.7 mg of substance/m3

Exposure method
Potential health effects
DNEL

Inhalation.
Short term local effects.
1.7 mg of substance/m3

NITRILOTRIMETHYLENETRIS(PHOSPHONIC ACID) (CAS: 6419-19-8)

Final use

Exposure method
Potential health effects
DNEL
Exposure method
Potential health effects
DNEL

Workers.

Dermal contact.
Short term systemic effects.
4.8 mg/kg body weight/day
Dermal contact.
Long term systemic effects.
4.8 mg/kg body weight/day

Final use

Exposure method
Potential health effects
DNEL

Consumers.

Dermal contact.
Short term systemic effects.
1.38 mg/kg body weight/day

Exposure method
Potential health effects
DNEL

Dermal contact.
Long term systemic effects.
1.38 mg/kg body weight/day



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HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)

Final use

Exposure method
Potential health effects
DNEL

Exposure method
Potential health effects
DNEL

Final use

Exposure method
Potential health effects
DNEL

Exposure method
Potential health effects
DNEL

Workers.

Inhalation.
Short term local effects.
3 mg of substance/m³

Inhalation.
Long term local effects.
1.4 mg of substance/m³

Consumers.

Inhalation.
Short term local effects.
1.93 mg of substance/m³

Inhalation.
Long term local effects.
0.21 mg of substance/m³

Predicted no effect concentration (PNEC):

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Environmental compartment	Soil.
PNEC	0.95 mg/kg
Environmental compartment	Fresh water.
PNEC	2.8 mg/l
Environmental compartment	Sea water.
PNEC	0.28 mg/l
Environmental compartment	Intermittent waste water.
PNEC	1.6 mg/l
Environmental compartment	Waste water treatment plant.
PNEC	57 mg/l

NITRILOTRIMETHYLENETRIS(PHOSPHONIC ACID) (CAS: 6419-19-8)

Environmental compartment	Soil.
PNEC	244 mg/kg
Environmental compartment	Fresh water.
PNEC	0.46 mg/l
Environmental compartment	Sea water.
PNEC	0.046 mg/l
Environmental compartment	Fresh water sediment.
PNEC	150 mg/kg
Environmental compartment	Marine sediment.
PNEC	15 mg/kg
Environmental compartment	Waste water treatment plant.
PNEC	20 mg/l

CITRIC ACID (CAS: 77-92-9)

Environmental compartment	Soil.
PNEC	33.1 mg/kg
Environmental compartment	Fresh water.
PNEC	0.44 mg/l
Environmental compartment	Sea water.
PNEC	0.044 mg/l
Environmental compartment	Fresh water sediment.
PNEC	3.46 mg/kg
Environmental compartment	Marine sediment.
PNEC	34.6 mg/kg

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Environmental compartment	Waste water treatment plant.
PNEC	1000 mg/l
HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)	
Environmental compartment	Soil.
PNEC	0.0023 mg/kg
Environmental compartment	Fresh water.
PNEC	0.0126 mg/l
Environmental compartment	Sea water.
PNEC	0.0126 mg/l
Environmental compartment Intermittent waste water.	
PNEC	0.0138 mg/l
Environmental compartment	Fresh water sediment.
PNEC	0.047 mg/kg
Environmental compartment	Marine sediment.
PNEC	0.047 mg/kg
Environmental compartmen	Waste water treatment plant.
PNEC	4.66 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE)



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard en166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly. - **Hand protection**

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Neoprene® (Polychloroprene)

- PVC (polyvinyl chloride)

Recommended properties :

- Impervious gloves in accordance with standard EN374

Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard en374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, Necessary physical protections (cutting, pricking, heat protection), level of dexterity required.



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Type of gloves recommended :

- Pvc (polyvinyl chloride)
- Butyl rubber (isobutylene-isoprene copolymer)
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (nbr))
- Neoprene® (polychloroprene)
- Natural latex

Recommended properties :

- Impervious gloves in accordance with standard en374

- **Body protection**

Avoid skin contact.

Wear suitable protective clothing.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with en14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with en13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General Information

Physical state Fluid Liquid

Important health, safety and environmental information

pH 2.00 .

Strongly acidic.

Boiling point/boiling range Not specified.

Flash point interval Not relevant.

Vapour pressure (50°C) Not relevant.

Density 1.15

Water solubility D ilutable.

Melting point/melting range Not specified.

Self-ignition temperature Not specified.

Decomposition point/decomposition range Not specified.

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Heat

Do not mix with other products unless you have a written authorization from us.



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10.5. Incompatible materials

Keep away from :

- strong bases
- reducing agents
- sodium hypochlorite
- combustible material
- flammable material

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Harmful if swallowed.

Harmful by inhalation.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

May cause an allergic reaction by skin contact.

Suspected human carcinogen.

May cause severe damage to organs in the event of repeated or prolonged exposure.

11.1.1. Substances

Acute toxicity:

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Oral route LD50 = 1780 mg/kg

Species Rat

Inhalation route LC50 > 1000 mg/l

OECD Guideline 403 (Acute Inhalation Toxicity)

NITRILOTRIMETHYLENETRIS(PHOSPHONIC ACID) (CAS: 6419-19-8)

Species Rat

Species Rabbit

CITRIC AC ID (CAS: 77-92-9)

Oral route LD50 = 5400 mg/kg

Species Mouse

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route LD50 > 2000 mg/kg

Species Rat

POLY(HEXAMETHYLENEBIGUANIDE)HYDROCHLORIDE (CAS: 27083-27-8)

Species Rat

Inhalation route LC50 = 0.29 mg/l

HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)

Species Rat

Skin corrosion/skin irritation :

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Corrosivity No observed effect.

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Respiratory or skin sensitisation

CITRIC ACID (CAS: 77-92-9)

Guinea Pig Maximisation Test (GMPT)

Non-sensitiser.

Species Others

OECD Guideline 406 (Skin Sensitisation)



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Germ cell mutagenicity :

HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)

Mutagenesis (in vivo)

Species

Negative.

Mouse

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

No mutagenic effect.

Mutagenesis (in vivo)

Negative.

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro)

Negative.

OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)

Ames test (in vitro)

Negative.

Specific target organ systemic toxicity - repeated exposure :

HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)

Oral route

Species

C = 26 mg/kg bodyweight/day

Rat

Duration of exposure 90 days

OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

Inhalation route

C %@IDC_STOTRE _INHAL_QUA NTIFIERS 0.0029 %@IDC_STOTRE _INHAL_UNITS

11.1.2. Mixture

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 7722-84-1 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

11.1.2. Mixture

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 7722-84-1 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12: ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)

Fish toxicity

LC50 = 16.4 mg/l

Duration of exposure

96 h

Crustacean toxicity

EC50 = 2.4 mg/l

Duration of exposure

48 h

NOEC = 0.63 mg/l

Species

Daphnia magna

Duration of exposure

21 days

Algae toxicity

NOEC = 0.63 mg/l

Species

Skeletonema costatum

Duration of exposure

72 h

Aquatic plant toxicity

ECr50 = 1.38 mg/l

Duration of exposure

72 h

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Fish toxicity

LC50 > 1000 mg/l

Species

Lepomis macrochirus

Duration of exposure

96 h

Crustacean toxicity

EC50 = 140 mg/l

Species

Daphnia magna

Duration of exposure

48 h



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Algae toxicity	ECr50 > 300 mg/l
Species	Desmodesmus subspicatus
Duration of exposure	72 h
	OECD Guideline 201 (Alga, Growth Inhibition Test)
	CITRIC ACID (CAS: 77-92-9)
Fish toxicity	LC50 = 440 mg/l
Species	Leuciscus idus
Duration of exposure	48 h
	OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity	EC50 = 1535 mg/l
Species	Daphnia magna
Duration of exposure	24 h
Algae toxicity	ECr50 = 425 mg/l
Species	Scenedesmus quadricauda
Duration of exposure	72 h
	POLY(HEXAMETHYLENEBIGUANIDE)HYDROCHLORIDE (CAS: 27083-27-8)
Fish toxicity	LC50 = 0.026 mg/l
Species	Oncorhynchus mykiss
Duration of exposure	96 h
Crustacean toxicity	EC50 = 0.09 mg/l
Species	Daphnia magna
Duration of exposure	48 h
	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity	ECr50 = 0.0191 mg/l
Species	Pseudokirchnerella subcapitata
Duration of exposure	72 h
	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

12.2. PERSISTENCE AND DEGRADABILITY

12.2.1. Substances

UNDECYLENAMIDO PROPYL BETAINE (CAS: 98510-75-9)	
Biodegradability	no degradability data is available, the substance is considered as not degrading quickly.
TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)	
Biodegradability	no degradability data is available, the substance is considered as not degrading quickly.
NITRILOTRIMETHYLENETRIS(PHOSPHONIC ACID) (CAS: 6419-19-8)	
Biodegradability	no degradability data is available, the substance is considered as not degrading quickly.
POLY(HEXAMETHYLENEBIGUANIDE)HYDROCHLORIDE (CAS: 27083-27-8)	
Biodegradability	Non-rapidly degradable.
HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)	
Biodegradability	Rapidly degradable.
CITRIC ACID (CAS: 77-92-9)	
Chemical oxygen demand	DCO = 728 %@IDC_ECOTOX_DCO_UNITS
Five-day biochemical oxygen demand	DBO5 = 526 %@IDC_ECOTOX_DBO_UNITS
Biodegradability	Rapidly degradable.
DBO5/DCO = 0.72	

12.2.2. Mixtures

Biodegradability no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential



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12.3.1. Substances

HYDROGEN PEROXIDE SOLUTION ...% (CAS: 7722-84-1)

Octanol/water partition coefficient log K_{ow} = -1.57

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects 12.3. Bioaccumulative potential

No data available.



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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

- Labelling for biocidal products (Regulation 1896/2000, 1687/2002, 2032/2003, 1048/2005, 1849/2006, 1451/2007 and Directive 98/8/EC) :

Name	CAS	%	Product-type
POLY(HEXAMETHYLENEBIGUANI DE)HYDROCHLORIDE	27083-27-8	50.00 g/kg	02
HYDROGEN PEROXIDE SOLUTION ...% 05	7722-84-1	282.43 g/kg	05
			02

Product-type 2 : Disinfectants and algacides not intended for direct application to humans or animals.

Product-type 5 : Drinking water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H271	May cause fire or explosion; strong oxidiser.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer .
H372	Causes 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.

Abbreviations :

DNEL	Derived No-Effect Level
PNEC	Predicted No-Effect Concentration
CMR	Carcinogenic, mutagenic or reprotoxic.
ADR	European agreement concerning the international carriage of dangerous goods by Road.
IMDG	International Maritime Dangerous Goods.
IATA	International Air Transport Association.



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ICAO	International Civil Aviation Organisation
RID	Regulations concerning the International carriage of Dangerous goods by rail.
WGK	Wassergefährdungsklasse (Water Hazard Class).
GHS05	Corrosion
GHS07	Exclamation mark
GHS08	Health hazard
GHS09	Environment