

P3-oxonia active**Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : P3-oxonia active

Product code : 106965E

Use of the
Substance/Mixture : Biocide

Substance type: : Mixture

For professional users only.

Product dilution information : 3.0 %

1.2 Relevant identified uses of the substance or mixture and uses advised againstIdentified uses : Process cleaner. Cleaning In place (CIP) process
Disinfection product. Semi-automatic process
Surface disinfectant. Spray and rinse manual processRecommended restrictions
on use : Reserved for industrial and professional use.**1.3 Details of the supplier of the safety data sheet**Company : Ecolab Ltd.
PO Box 11; Winnington Avenue
Northwich, Cheshire, United Kingdom CW8 4DX
+ 44 (0)1606 74488
ccs@ecolab.com**1.4 Emergency telephone number**Emergency telephone
number : +441618841235
+32-(0)3-575-5555 Trans-EuropeanPoison Information Centre
telephone number : For medical professionals only: 0344 892 0111Date of Compilation/Revision : 15.04.2024
version : 4.1**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)****Product AS SOLD**

Oxidizing liquids, Category 2

H272

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Corrosive to metals, Category 1	H290
Acute toxicity, Category 4	H302
Skin corrosion, Category 1	H314
Serious eye damage, Category 1	H318
Acute toxicity, Category 4	H332
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335
Chronic aquatic toxicity, Category 1	H410

Product AT USE DILUTION

Chronic aquatic toxicity, Category 3	H412
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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Product AS SOLD

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H272 May intensify fire; oxidiser.
 H290 May be corrosive to metals.
 H302 + H332 Harmful if swallowed 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 : **Prevention:**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P220 Keep away from clothing and other combustible materials.
 - P260 Do not breathe vapours.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves/ eye protection/ face protection.
- Response:**
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 - P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P310 Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

- Hydrogen peroxide
- Acetic acid
- Peracetic acid

Product AT USE DILUTION

Hazard Statements	: H412	Harmful to aquatic life with long lasting effects.
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Precautionary Statements : **Prevention:**
P273 Avoid release to the environment.

2.3 Other hazards

Product AS SOLD

Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Product AT USE DILUTION

Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Product AS SOLD

Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration : [%]
Hydrogen peroxide	7722-84-1 231-765-0 01-2119485845-22	Nota B Oxidizing liquids Category 1; H271 Acute toxicity Category 4; H302 Acute toxicity Category 4; H332 Skin corrosion Sub-category 1A; H314 Serious eye damage Category 1; H318 Specific target organ toxicity - single exposure Category 3; H335 Chronic aquatic toxicity Category 3; H412 Oxidizing liquids Category 1 H271 >= 70 % Oxidizing liquids Category 2 H272 50 - < 70 % Skin corrosion Category 1A H314 >= 70 % Skin corrosion Category 1B H314 50 - < 70 % Skin irritation Category 2 H315 35 - < 50 % Serious eye damage Category 1 H318 8 - < 50 % Eye irritation Category 2 H319 5 - < 8 % Specific target organ toxicity - single exposure Category 3 H335 >= 35 %	>= 25 - < 30
Acetic acid	64-19-7 200-580-7 01-2119475328-30	Nota B Flammable liquids Category 3; H226 Skin corrosion Sub-category 1A; H314 Serious eye damage Category 1; H318 Skin corrosion Category 1A H314 >= 90 % Skin corrosion Category 1B H314 25 - < 90 % Skin irritation Category 2 H315 10 - < 25 % Eye irritation Category 2 H319 10 - < 25 %	>= 5 - < 10

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Peracetic acid	79-21-0 201-186-8 01-2119531330-56	Flammable liquids Category 3; H226 Organic peroxides Type D; H242 Acute toxicity Category 4; H302 Acute toxicity Category 4; H332 Acute toxicity Category 4; H312 Skin corrosion Category 1A; H314 Acute aquatic toxicity Category 1; H400 Specific target organ toxicity - single exposure Category 3; H335 Chronic aquatic toxicity Category 1; H410 Specific target organ toxicity - single exposure Category 3 H335 >= 1 % M = 1 M(Chronic) = 10	>= 3 - < 5
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**Product AT USE DILUTION
Hazardous components**

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration : [%]
Peracetic acid	79-21-0 201-186-8 01-2119531330-56	Flammable liquids Category 3; H226 Organic peroxides Type D; H242 Acute toxicity Category 4; H302 Acute toxicity Category 4; H332 Acute toxicity Category 4; H312 Skin corrosion Category 1A; H314 Acute aquatic toxicity Category 1; H400 Specific target organ toxicity - single exposure Category 3; H335 Chronic aquatic toxicity Category 1; H410 Specific target organ toxicity - single exposure Category 3 H335 >= 1 % M = 1 M(Chronic) = 10	>= 0.1 - < 0.25
Substances with a workplace exposure limit :			
Hydrogen peroxide	7722-84-1 231-765-0 01-2119485845-22	Oxidizing liquids Category 1; H271 Acute toxicity Category 4; H302 Acute toxicity Category 4; H332 Skin corrosion Sub-category 1A; H314 Serious eye damage Category 1; H318 Specific target organ toxicity - single exposure Category 3; H335 Chronic aquatic toxicity Category 3; H412 Oxidizing liquids Category 1 H271 >= 70 % Oxidizing liquids Category 2 H272 50 - < 70 % Skin corrosion Category 1A H314 >= 70 % Skin corrosion Category 1B H314 50 - < 70 % Skin irritation Category 2 H315 35 - < 50 % Serious eye damage Category 1 H318 8 - < 50 % Eye irritation Category 2 H319 5 - < 8 % Specific target organ toxicity - single	>= 0.5 - < 1

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		exposure Category 3 H335 >= 35 %	
Acetic acid	64-19-7 200-580-7 01-2119475328-30	Flammable liquids Category 3; H226 Skin corrosion Sub-category 1A; H314 Serious eye damage Category 1; H318 Skin corrosion Category 1A H314 >= 90 % Skin corrosion Category 1B H314 25 - < 90 % Skin irritation Category 2 H315 10 - < 25 % Eye irritation Category 2 H319 10 - < 25 %	>= 0.1 - < 0.25

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section: 4. FIRST AID MEASURES

4.1 Description of first aid measures

Product AS SOLD

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.

Product AT USE DILUTION

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

Section: 5. FIREFIGHTING MEASURES

Product AS SOLD

5.1 Extinguishing media

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- Suitable extinguishing media : Water
- Unsuitable extinguishing media : Foam
Carbon dioxide (CO2)
Dry chemical

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Special protective equipment for firefighters
Oxidizer. Contact with other material may cause fire.
On decomposition, releases oxygen which may intensify fire.
Oxidizer; material is an oxidizer which may readily react with other materials, especially upon heating.
In case of a fire, if it is possible without risk, remove all containers exposed to the fire and store them in a safe place, away from any source of heat.
Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : Depending on combustion properties, decomposition products may include following materials:
Carbon oxides

5.3 Advice for firefighters

- Special protective equipment for firefighters : In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.
- 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. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Product AS SOLD

- Advice for non-emergency personnel : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Move all flammable sources out of danger and keep them away from the scene. Refer to protective measures listed in sections 7 and 8.

- Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

Product AT USE DILUTION

- Advice for non-emergency personnel : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

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6.2 Environmental precautions

Product AS SOLD

Environmental precautions : Do not allow contact with soil, surface or ground water. DO NOT hermetically seal any defective containers, including drums (risk of bursting due to the decomposition of the product)

Product AT USE DILUTION

Environmental precautions : Do not allow contact with soil, surface or ground water.

6.3 Methods and materials for containment and cleaning up

Product AS SOLD

Methods for cleaning up : Stop leak if safe to do so. Isolate the waste do not allow it to come into contact with incompatible materials. For small spills contain with sand or vermiculite and dilute the contained product at least 10 times with water. Transfer to an open topped container and remove to a safe place for neutralization* / disposal. For large spills contain spill and evacuate the area, leave until the reaction subsides, then collect up for disposal. Obtain consent from the local water company / authority if considering discharge to sewer. *NEUTRALIZATION : once diluted, neutralize with a suitable alkali such as sodium bicarbonate. Combustible materials exposed to this product should be rinsed immediately with large amounts of water to ensure that all product is removed. Residual product which is allowed to dry on organic materials such as rags, cloths, paper, fabrics, cotton, leather, wood, or other combustibles may spontaneously ignite and result in a fire.

Product AT USE DILUTION

Methods for cleaning up : Stop leak if safe to do so. 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). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information.
For personal protection see section 8.
See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Product AS SOLD

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not breathe spray, vapour. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after

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handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Product AT USE DILUTION

Advice on safe handling : Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Product AS SOLD

Requirements for storage areas and containers : Keep in a cool, well-ventilated place. Keep away from reducing agents. Keep away from strong bases. Keep away from combustible material. Absorb spillage to prevent material damage. Keep out of reach of children. Keep container tightly closed. Keep only in original packaging. Store in suitable labeled containers. Pressure bursts may occur due to gas evolution if the container is not adequately vented. Do not hermetically seal the container. Always transport and store the containers upright. Risk of overpressure and bursting in the event of decomposition in closed containers and in pipes.

Storage temperature : 0 °C to 30 °C

Packaging material : Suitable material: Plastic material
 Unsuitable material: Mild steel, Aluminium

Product AT USE DILUTION

Requirements for storage areas and containers : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

7.3 Specific end uses

Product AS SOLD

Specific use(s) : Process cleaner. Cleaning In place (CIP) process
 Disinfection product. Semi-automatic process
 Surface disinfectant. Spray and rinse manual process

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Product AS SOLD

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Hydrogen peroxide	7722-84-1	TWA	1 ppm 1.4 mg/m3	UKCOSSTD
		STEL	2 ppm 2.8 mg/m3	UKCOSSTD
Acetic acid	64-19-7	TWA	10 ppm	2017/164/EU

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			25 mg/m3	
Further information		Indicative		
		STEL	20 ppm 50 mg/m3	2017/164/EU
Further information		Indicative		
		STEL	20 ppm 50 mg/m3	UKCOSSTD
		TWA	10 ppm 25 mg/m3	UKCOSSTD

DNEL

Hydrogen peroxide	:	<p>End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 1.4 mg/m3</p> <p>End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term - systemic Value: 3 mg/m3</p>
Acetic acid	:	<p>End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 25 mg/m3</p> <p>End Use: Workers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 25 mg/m3</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 25 mg/m3</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 25 mg/m3</p>
Peracetic acid	:	<p>End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 0.56 mg/m3</p> <p>End Use: Workers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 0.56 mg/m3</p> <p>End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 0.56 mg/m3</p> <p>End Use: Workers Exposure routes: Inhalation</p>

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	<p>Potential health effects: Acute local effects Value: 0.56 mg/m³</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 0.28 mg/m³</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 0.28 mg/m³</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 0.28 mg/m³</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 0.28 mg/m³</p> <p>End Use: Consumers Exposure routes: Oral Potential health effects: Long-term systemic effects Value: 1.25 mg/m³</p> <p>End Use: Consumers Exposure routes: Oral Potential health effects: Acute systemic effects Value: 1.25 mg/m³</p>
<p>HEDP</p>	<p>: End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 12 mg/m³</p> <p>End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 34 mg/m³</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 2.95 mg/m³</p> <p>End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 17 mg/m³</p> <p>End Use: Consumers Exposure routes: Oral Potential health effects: Long-term systemic effects Value: 1.7 mg/m³</p>

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	End Use: Consumers Exposure routes: Oral Potential health effects: Long-term systemic effects Value: 1.7 mg/m ³
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PNEC

Peracetic acid	: Fresh water Value: 0.000224 mg/l Fresh water sediment Value: 0.00018 mg/kg Water Value: 0.051 mg/l Soil Value: 0.32 mg/kg
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8.2 Exposure controls

Product AS SOLD

Appropriate engineering controls

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Eye/face protection (EN 166) : Safety goggles
Face-shield

Hand protection (EN 374) : In case of skin contact it is recommended to wear gloves to avoid oxidation effect (e.g. skin whitening)
Recommended preventive skin protection
Gloves
Nitrile rubber
butyl-rubber
Breakthrough time: 1 – 4 hours
Minimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4 mm or equivalent (please refer to the gloves manufacturer/distributor for advise).
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection (EN 14605) : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing including appropriate safety shoes

Respiratory protection (EN : When respiratory risks cannot be avoided or sufficiently limited by

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143, 14387) technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:P

Product AT USE DILUTION

Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Eye/face protection (EN 166) : No special protective equipment required.

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection (EN 14605) : No special protective equipment required.

Respiratory protection (EN 143, 14387) : None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Environmental exposure controls

General advice : Consider the provision of containment around storage vessels.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Colour	: colourless	colourless
Odour	: pungent	characteristic
pH	: 0.5 - 1.5, 100 %	2.5
Flash point	: 100 °C closed cup, Does not sustain combustion.	
Odour Threshold	: Not applicable and/or not determined for the mixture	
Melting point/freezing point	: Not applicable and/or not determined for the mixture	
Initial boiling point and boiling range	: Not applicable and/or not determined for the mixture	
Evaporation rate	: Not applicable and/or not determined for the mixture	
Flammability (solid, gas)	: Not applicable and/or not determined for the mixture	

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Upper explosion limit	: Not applicable and/or not determined for the mixture
Lower explosion limit	: Not applicable and/or not determined for the mixture
Vapour pressure	: Not applicable and/or not determined for the mixture
Relative vapour density	: Not applicable and/or not determined for the mixture
Relative density	: 1.11 - 1.13
Water solubility	: soluble
Solubility in other solvents	: Not applicable and/or not determined for the mixture
Partition coefficient: n-octanol/water	: Not applicable and/or not determined for the mixture
Auto-ignition temperature	: Not applicable and/or not determined for the mixture
Thermal decomposition	: Not applicable and/or not determined for the mixture
Viscosity, kinematic	: Not applicable and/or not determined for the mixture
Explosive properties	: Not applicable and/or not determined for the mixture
Oxidizing properties	: YesThe substance or mixture is classified as oxidizing with the category 2.

9.2 Other information

Self-Accelerating decomposition temperature (SADT)	: 60 °C Method: UN-Test H.4
VOC	: Not applicable.

Section: 10. STABILITY AND REACTIVITY

Product AS SOLD

10.1 Reactivity

Decomposes on heating. Potential for exothermic hazard.

10.2 Chemical stability

Decomposes on heating.
Contamination may result in dangerous pressure increases - closed containers may rupture.

10.3 Possibility of hazardous reactions

Do not mix with bleach or other chlorinated products – will cause chlorine gas.

10.4 Conditions to avoid

Direct sources of heat.
Exposure to sunlight.

10.5 Incompatible materials

Organic materials
Metals
Bases

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Mild steel
Aluminium
Metals
Reducing agents
Flammable materials

10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials:
Carbon oxides

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product AS SOLD

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Product

Acute oral toxicity : Acute toxicity estimate : 1,550 mg/kg
Acute inhalation toxicity : 4 h Acute toxicity estimate : 4.76 mg/l
Test atmosphere: dust/mist
Acute dermal toxicity : Acute toxicity estimate : > 2,000 mg/kg
Skin corrosion/irritation : There is no data available for this product.
Serious eye damage/eye irritation : There is no data available for this product.
Respiratory or skin sensitization : There is no data available for this product.
Carcinogenicity : There is no data available for this product.
Reproductive effects : There is no data available for this product.
Germ cell mutagenicity : There is no data available for this product.
Teratogenicity : There is no data available for this product.
STOT - single exposure : There is no data available for this product.
STOT - repeated exposure : There is no data available for this product.
Aspiration toxicity : There is no data available for this product.

Components

Acute oral toxicity : Hydrogen peroxide LD50 rat: 486 mg/kg
Acetic acid LD50 rat: 3,310 mg/kg

Components

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Acute inhalation toxicity : Peracetic acid 4 h LC50 rat: 1.5 mg/l
Test atmosphere: dust/mist

Components

Acute dermal toxicity : Acetic acid LD50 rabbit: 1,060 mg/kg

Potential Health Effects

Product AS SOLD

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes : Health injuries are not known or expected under normal use.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

Product AT USE DILUTION

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Section: 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product AS SOLD

Environmental Effects : Very toxic to aquatic life with long lasting effects.

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Product AT USE DILUTION

Environmental Effects : Harmful to aquatic life with long lasting effects.

**Product AS SOLD
Product**

Toxicity to fish : no data available

Toxicity to daphnia and other aquatic invertebrates : no data available

Toxicity to algae : no data available

Components

Toxicity to fish : Hydrogen peroxide96 h LC50 Pimephales promelas (fathead minnow): 16.4 mg/l

Acetic acid96 h LC50 Oncorhynchus mykiss (rainbow trout): > 1,000 mg/l

Peracetic acid96 h LC50: 0.8 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates : Acetic acid48 h EC50 Daphnia magna (Water flea): 39.6 mg/l

Peracetic acid48 h EC50: 0.73 mg/l

Components

Toxicity to algae : Hydrogen peroxide72 h EC50 Skeletonema costatum (marine diatom): 1.38 mg/l

Acetic acid72 h EC50 Skeletonema costatum (marine diatom): > 1,000 mg/l

Peracetic acid72 h EC50: 0.7 mg/l

12.2 Persistence and degradability

Product

no data available

Components

Biodegradability : Hydrogen peroxideResult: Not applicable - inorganic

Acetic acidResult: Readily biodegradable.

Peracetic acidResult: Readily biodegradable.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

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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.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

Product AS SOLD

Product : Do not contaminate storm water drains, natural waterways or soil with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of contents/container in accordance with local regulations. Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

Guidance for Waste Code selection : Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations.

Product AT USE DILUTION

Product : Do not contaminate storm water drains, natural waterways or soil with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of contents/container in accordance with local regulations. Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

Section: 14. TRANSPORT INFORMATION

Product AS SOLD

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The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)

- 14.1 UN number : 3149
- 14.2 UN proper shipping name : HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
- 14.3 Transport hazard class(es) : 5.1 (8)
- 14.4 Packing group : II
- 14.5 Environmental hazards : Yes

- 14.6 Special precautions for user : None

Air transport (IATA)

- 14.1 UN number : 3149
- 14.2 UN proper shipping name : Hydrogen peroxide and peroxyacetic acid mixture stabilized
- 14.3 Transport hazard class(es) : 5.1 (8)
- 14.4 Packing group : II
- 14.5 Environmental hazards : Yes

- 14.6 Special precautions for user : None

Sea transport (IMDG/IMO)

- 14.1 UN number : 3149
- 14.2 UN proper shipping name : HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
- 14.3 Transport hazard class(es) : 5.1 (8)
- 14.4 Packing group : II
- 14.5 Environmental hazards : Yes

- 14.6 Special precautions for user : None
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

Section: 15. REGULATORY INFORMATION

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

Control of Explosives Precursors and Poisons Regulations 2023

This product is regulated (containing reportable or/and regulated substances) by the Control of Explosives Precursors and Poison Regulations 2023: all suspicious transactions, significant disappearances and thefts should be reported to the relevant national contact point.

- Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : ENVIRONMENTAL HAZARDS E1
Lower tier : 100 t
Upper tier : 200 t
OXIDIZING LIQUIDS AND SOLIDS P8
Lower tier : 50 t

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Upper tier : 200 t

Candidate List of Substances : Not applicable.
of Very High Concern for
Authorisation

National Regulations

Take note of Dir 94/33/EC on the protection of young people at work.

Other regulations : The Chemicals (Hazard Information and Packaging for Supply) Regulations.
The Control of Substances Hazardous to Health Regulations.
Health and Safety at Work Act.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

Classification	Justification
Oxidizing liquids 2, H272	Based on product data or assessment
Corrosive to metals 1, H290	Based on product data or assessment
Acute toxicity 4, H302	Calculation method
Skin corrosion 1, H314	Based on product data or assessment
Serious eye damage 1, H318	Based on product data or assessment
Acute toxicity 4, H332	Calculation method
Specific target organ toxicity - single exposure 3, H335	Calculation method
Chronic aquatic toxicity 1, H410	Calculation method

Full text of H-Statements

H226 Flammable liquid and vapour.
H242 Heating may cause a fire.
H271 May cause fire or explosion; strong oxidiser.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
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

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - 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 Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -

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Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECl - 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

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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.

Annex: Exposure Scenarios

Exposure Scenario: Process cleaner. Cleaning In place (CIP) process

Life Cycle Stage : Use at industrial sites

Product category : **PC35** Washing and cleaning products (including solvent based products)

Contributing scenario controlling environmental exposure for:

Environmental release category : **ERC4** Industrial use of processing aids in processes and products, not becoming part of articles

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Daily amount per site : 50 kg
Type of Sewage Treatment Plant : Municipal sewage treatment plant

Contributing scenario controlling worker exposure for:

Process category : **PROC8b** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities
Exposure duration : 60 min
Operational conditions and risk management measures : Indoor
Local Exhaust Ventilation is not required
General ventilation Ventilation rate per hour 1
Skin Protection : see section 8
Respiratory Protection : see section 8

Contributing scenario controlling worker exposure for:

Process category : **PROC1** Use in closed process, no likelihood of exposure
Exposure duration : 480 min
Operational conditions and risk management measures : Indoor
Local Exhaust Ventilation is not required
General ventilation Ventilation rate per hour 1
Skin Protection : see section 8
Respiratory Protection : see section 8

Exposure Scenario: Disinfection product. Semi-automatic process

Life Cycle Stage : Use at industrial sites
Product category : **PC35** Washing and cleaning products (including solvent based products)

Contributing scenario controlling environmental exposure for:

Environmental release category : **ERC4** Industrial use of processing aids in processes and products, not becoming part of articles
Daily amount per site : 50 kg
Type of Sewage Treatment Plant : Municipal sewage treatment plant

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Contributing scenario controlling worker exposure for:

Process category : **PROC8b** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

Exposure duration : 60 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

Contributing scenario controlling worker exposure for:

Process category : **PROC4** Use in batch and other process (synthesis) where opportunity for exposure arises

Exposure duration : 480 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

Exposure Scenario: Surface disinfectant. Spray and rinse manual process

Life Cycle Stage : Widespread use by professional workers

Product category : **PC35** Washing and cleaning products (including solvent based products)

Contributing scenario controlling environmental exposure for:

Environmental release category : **ERC8a** Wide dispersive indoor use of processing aids in open systems

Daily amount per site : 7.5 kg

Type of Sewage Treatment Plant : Municipal sewage treatment plant

Contributing scenario controlling worker exposure for:

Process category : **PROC10** Roller application or brushing

Exposure duration : 480 min

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Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

Contributing scenario controlling worker exposure for:

Process category : **PROC8a** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities

Exposure duration : 60 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

Contributing scenario controlling worker exposure for:

Process category : **PROC11** Non industrial spraying

Exposure duration : 60 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8