# HYPEROX

| Version | Revision Date: | SDS Number: | Date of last issue: 08.06.2022 |
|---|---|---|---|
| 4.0 | 10.01.2025 | 203000010358 | Country / Language: GB / 6N (EN) |

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

### 1.1 Product identifier

Trade name : HYPEROX

Product code : 000000000062524731

UFI : PNU8-F0QE-N00Y-58J3

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

Use of the Sub-stance/Mixture : Professional use, Disinfectants

### 1.3 Details of the supplier of the safety data sheet

Company : Antec International Limited
Windham Road
CO10 2XD Sudbury / Suffolk
Chilton Industrial Estate, Great Britain

Responsible Department : +49 221 8885 2288
infosds@lanxess.com

### 1.4 Emergency telephone number

Emergency telephone number : For 24/7 multilingual emergency please call CHEMTREC EMEA: +44 20 3885 0382 and mention CCN1018725.

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)**

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 | H332: Harmful if inhaled. |
| Acute toxicity, Category 4 | H312: Harmful in contact with skin. |
| Skin corrosion, Sub-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, Respiratory system | H335: May cause respiratory irritation. |
| Long-term (chronic) aquatic hazard, Category 2 | H411: Toxic to aquatic life with long lasting effects. |

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)**

Hazard pictograms :



Signal word : Danger

Hazard statements :
H290 May be corrosive to metals.
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH071Corrosive to the respiratory tract.

Precautionary statements :

**Prevention:**

P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

**Response:**

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P391 Collect spillage.

Hazardous components which must be listed on the label:

hydrogen peroxide
acetic acid
peracetic acid
Sulfonic acids, C13-17-sec-alkane, sodium salts

### 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.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Components**

| Chemical name | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification | Concentration (% w/w) |
|---|---|---|---|
| hydrogen peroxide | 7722-84-1<br>231-765-0<br>008-003-00-9 | Ox. Liq. 1; H271<br>Acute Tox. 4; H302<br>Acute Tox. 4; H332<br>Skin Corr. 1A; H314<br>Eye Dam. 1; H318<br>STOT SE 3; H335 (Respiratory system)<br>Aquatic Chronic 3; H412 | >= 25 - < 30 |
| acetic acid | 64-19-7<br>200-580-7<br>607-002-00-6 | Flam. Liq. 3; H226<br>Skin Corr. 1A; H314<br>Eye Dam. 1; H318 | >= 5 - < 10 |
| peracetic acid | 79-21-0<br>201-186-8<br>607-094-00-8 | Flam. Liq. 3; H226<br>Org. Perox. D; H242<br>Acute Tox. 3; H301<br>Acute Tox. 3; H331<br>Acute Tox. 4; H312<br>Skin Corr. 1A; H314<br>Eye Dam. 1; H318<br>STOT SE 3; H335 (Respiratory system)<br>Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410<br>_____<br>M-Factor (Acute aquatic toxicity): 1<br>M-Factor (Chronic aquatic toxicity): 1 | >= 3 - < 5 |
| Sulfonic acids, C13-17-sec-alkane, sodium salts | 85711-69-9<br>288-330-3 | Skin Irrit. 2; H315<br>Eye Dam. 1; H318 | >= 1 - < 3 |

**Specific Concentration limits (Regulation EC) No 1272/2008)**

| Chemical name | CAS-No.<br>EC-No. | Classification | Concentration (%) |
|---|---|---|---|
| hydrogen peroxide | 7722-84-1<br>231-765-0 | Ox. Liq.1; H271<br>Ox. Liq.2; H272<br>Skin Corr.1A; H314<br>Skin Corr.1B; H314<br>Skin Irrit.2; H315<br>Eye Dam.1; H318<br>Eye Irrit.2; H319<br>STOT SE3; H335 | >= 70 %<br>50 - < 70 %<br>>= 70 %<br>50 - < 70 %<br>35 - < 50 %<br>8 - < 50 %<br>5 - < 8 %<br>>= 35 % |
| acetic acid | 64-19-7<br>200-580-7 | Skin Corr.1A; H314<br>Skin Corr.1B; H314<br>Skin Irrit.2; H315<br>Eye Irrit.2; H319 | >= 90 %<br>25 - < 90 %<br>10 - < 25 %<br>10 - < 25 % |
| peracetic acid | 79-21-0<br>201-186-8 | STOT SE3; H335 | >= 1 % |

For explanation of abbreviations see section 16.
Disclaimer: EC numbers starting with 6, 7, 8, or 9 in this document are ECHA List Numbers used for internal reference and do not carry legal significance as typical EC Numbers in Safety Data Sheets.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.

Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
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

Risks : Harmful if swallowed, in contact with skin or if inhaled.
Causes serious eye damage.
May cause respiratory irritation.
Corrosive to the respiratory tract.
Causes severe burns.

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

Treatment : Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

### 5.2 Special hazards arising from the substance or mixture

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

Hazardous combustion products : Carbon dioxide (CO2)
Carbon monoxide

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Remove all sources of ignition.

### 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 : 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).
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
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 : Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : 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 cool place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Recommended storage temperature : < 40 °C

Further information on storage stability : Stable under recommended storage conditions.

### 7.3 Specific end use(s)

Specific use(s) : No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational Exposure Limits**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---|---|---|---|---|
| hydrogen peroxide | 7722-84-1 | TWA | 1 ppm<br>1.4 mg/m3 | GB EH40 |
| | | STEL | 2 ppm<br>2.8 mg/m3 | GB EH40 |
| acetic acid | 64-19-7 | STEL | 20 ppm<br>50 mg/m3 | GB EH40 |
| | | TWA | 10 ppm<br>25 mg/m3 | GB EH40 |
| | | TWA | 10 ppm<br>25 mg/m3 | 2017/164/EU |
| | Further information: Indicative | | | |
| | | STEL | 20 ppm<br>50 mg/m3 | 2017/164/EU |
| | Further information: Indicative | | | |

### 8.2 Exposure controls

**Engineering measures**

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Personal protective equipment**

Eye/face protection : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection
- Material : Polychloroprene - CR
- Break through time : > 480 min
- Glove thickness : 0.65 mm
- Directive : Protective gloves complying with EN 374.

| | | |
|---|---|---|
| Material | : | Natural rubber - NR |
| Break through time | : | > 480 min |
| Glove thickness | : | 0.22 mm |
| Directive | : | Protective gloves complying with EN 374. |
| Remarks | : | The suitability for a specific workplace should be discussed with the producers of the protective gloves. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations |
| Skin and body protection | : | Impervious clothing<br>Choose body protection according to the amount and concentration of the dangerous substance at the work place. |
| Respiratory protection | : | In the case of vapour formation use a respirator with an approved filter. |
| Filter type | : | Recommended Filter type:<br><br>ABEK-P3-filter |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| Appearance | : | Liquid |
| Physical state | : | liquid |
| Colour | : | colourless |
| Odour | : | Pungent smelling. |
| Odour Threshold | : | No data available |
| Melting point/freezing point | : | -61 - -60 °C |
| Boiling point/boiling range | : | Decomposition: Decomposes below the boiling point. |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Flash point | : | > 100 °C<br>Method: closed cup<br>unmeasurable |
| Ignition temperature | : | 435 °C |

| | | |
|---|---|---|
| Decomposition temperature | : | No data available |
| Self-Accelerating decomposition temperature (SADT) | : | > 75 °C<br>Method: UN-Test H.4 |
| pH | : | 0.2<br>Concentration: 100 % |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | 1.247 mm2/s (20 °C)<br>Method: OECD Test Guideline 114 |
| Solubility(ies) | | |
| Water solubility | : | No data available |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Vapour pressure | : | No data available |
| Relative density | : | No data available |
| Density | : | 1.13 g/cm3 (20 °C)<br>Method: OECD Test Guideline 109 |
| Relative vapour density | : | No data available |

**9.2 Other information**

| | | |
|---|---|---|
| Explosives | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |
| Flammable solids | | |
| Burning number | : | No data available |
| Self-ignition | : | The substance or mixture is not classified as pyrophoric. The substance or mixture is not classified as self heating. |
| Metal corrosion rate | : | Corrosive to metals |
| Evaporation rate | : | No data available |
| Miscibility with water | : | No data available |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Potential for exothermic hazard If contaminated with impurities or incompatible substances, self-accelerated exothermic decomposition may occur. Decomposition in confined spaces and pipes may lead to over-pressure and bursting. Heating can release hazardous gases. Oxygen formation is possible. Decomposes on heating.

### 10.4 Conditions to avoid

Conditions to avoid : Exposure to sunlight.

Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid : Incompatible with bases.
Metals
Reducing agents
Powdered metal salts
Combustible substances
Flammable materials
organic solvent

### 10.6 Hazardous decomposition products

Hazardous decomposition products : acetic acid
Oxygen
Steam

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**

Harmful if swallowed, in contact with skin or if inhaled.

**Product:**

Acute oral toxicity : LD50 (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: dust/mist

Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rabbit, male and female): 1,147 mg/kg

**Components:**

**hydrogen peroxide:**

Acute oral toxicity : LD50 (Rat): > 500 mg/kg

Acute inhalation toxicity : LC0 (Rat, male and female): > 0.17 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Remarks: Highest producible concentration.

Acute dermal toxicity : LD50 (Rat): 4,060 mg/kg

**acetic acid:**

Acute oral toxicity : LD50 (Rat, male and female): 3,310 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 11.4 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: No

Acute dermal toxicity : LD50 (Rabbit): 1,060 mg/kg

**peracetic acid:**

Acute oral toxicity : LD50 (Rat, male and female): 73.2 mg/kg
Method: US EPA Test Guideline OPP 81-1

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.

**Sulfonic acids, C13-17-sec-alkane, sodium salts:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

**Skin corrosion/irritation**

Causes severe burns.

**Product:**

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

**Components:**

**hydrogen peroxide:**

Assessment : Irritating to skin.

**acetic acid:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Method | : | OECD Test Guideline 404 |
| Result | : | Mild skin irritation |
| GLP | : | No information available. |
| Remarks | : | Aqueous solution |

**peracetic acid:**

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

**Sulfonic acids, C13-17-sec-alkane, sodium salts:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Method | : | OECD Test Guideline 404 |
| Result | : | Irritating to skin. |

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Components:**

**hydrogen peroxide:**

Assessment : Risk of serious damage to eyes.

**acetic acid:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Method | : | OECD Test Guideline 405 |
| Result | : | Irreversible effects on the eye |

**peracetic acid:**

Assessment : Risk of serious damage to eyes.

**Sulfonic acids, C13-17-sec-alkane, sodium salts:**

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

**Respiratory or skin sensitisation**

**Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

Not classified based on available information.

**Product:**

| | | |
|---|---|---|
| Exposure routes | : | Skin contact |
| Species | : | Guinea pig |
| Method | : | OECD Test Guideline 406 |
| Result | : | Does not cause skin sensitisation. |

**Components:**

**hydrogen peroxide:**

| | | |
|---|---|---|
| Exposure routes | : | Skin contact |
| Species | : | Guinea pig |
| Method | : | OECD Test Guideline 406 |
| Result | : | Did not cause sensitisation on laboratory animals. |

**acetic acid:**

| | | |
|---|---|---|
| Assessment | : | Did not cause sensitisation on laboratory animals. |

**peracetic acid:**

| | | |
|---|---|---|
| Exposure routes | : | Skin contact |
| Species | : | Guinea pig |
| Method | : | OECD Test Guideline 406 |
| Result | : | Did not cause sensitisation on laboratory animals. |

**Sulfonic acids, C13-17-sec-alkane, sodium salts:**

| | | |
|---|---|---|
| Exposure routes | : | Skin contact |
| Species | : | Guinea pig |
| Result | : | Did not cause sensitisation on laboratory animals. |

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**acetic acid:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Ames test<br>Test system: Salmonella typhimurium<br>Metabolic activation: with and without metabolic activation<br>Method: OECD Test Guideline 471<br>Result: negative<br><br>Test Type: Chromosome aberration test in vitro<br>Test system: Chinese hamster ovary cells<br>Metabolic activation: with and without metabolic activation<br>Method: OECD Test Guideline 473<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Micronucleus test<br>Species: Rat (male and female)<br>Application Route: Inhalation<br>Method: Regulation (EC) No. 440/2008, Annex, B.12 |

Result: negative
GLP: Yes

**peracetic acid:**

Genotoxicity in vitro : Remarks: Not mutagenic in a standard battery of genetic toxicological tests.

Genotoxicity in vivo : Species: Mammalian-Animal
Method: Regulation (EC) No. 440/2008, Annex, B.22
Result: negative

**Sulfonic acids, C13-17-sec-alkane, sodium salts:**

Genotoxicity in vitro : Remarks: Not mutagenic in a standard battery of genetic toxicological tests.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**Components:**

**acetic acid:**

Effects on foetal development : Species: Rabbit, female
Application Route: Oral
Dose: 1600 milligram per kilogram
Duration of Single Treatment: 13 d
General Toxicity Maternal: NOAEL: 1,600 mg/kg body weight
Embryo-foetal toxicity: NOAEL: 1,600 mg/kg body weight
Method: Regulation (EC) No. 440/2008, Annex, B.31
Result: No adverse effects

**STOT - single exposure**

May cause respiratory irritation.
Corrosive to the respiratory tract.

**Components:**

**hydrogen peroxide:**

Assessment : May cause respiratory irritation.

**peracetic acid:**

Assessment : May cause respiratory irritation.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Further information**

**Product:**

Remarks : No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

**Components:**

**hydrogen peroxide:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 16.4 mg/l
Exposure time: 96 h
Test Type: semi-static test
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 2.4 mg/l
Exposure time: 48 h
Test Type: semi-static test
Remarks: Fresh water

Toxicity to algae/aquatic plants : EC50 (Skeletonema costatum (marine diatom)): 1.38 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Remarks: salt water

NOEC (Skeletonema costatum (marine diatom)): 0.63 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Remarks: salt water

Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.63 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Remarks: Fresh water

**acetic acid:**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 300.82 mg/l
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: No
Method: OECD Test Guideline 203
GLP: Yes
Remarks: Fresh water

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 300.82 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Analytical monitoring: Yes<br>Method: OECD Test Guideline 202<br>GLP: Yes<br>Remarks: Fresh water |
| Toxicity to algae/aquatic plants | : | EC50 (Skeletonema costatum (marine diatom)): > 300.82 mg/l<br>End point: Growth rate<br>Exposure time: 72 h<br>Analytical monitoring: No<br>Method: ISO 10253<br>GLP: Yes<br>Remarks: salt water |
| Toxicity to microorganisms | : | NOEC (Pseudomonas putida): 1,150 mg/l<br>Exposure time: 16 h<br>Remarks: Fresh water |

**peracetic acid:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 0.53 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203<br>GLP: Yes<br>Remarks: Fresh water |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0.73 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202<br>GLP: Yes<br>Remarks: Fresh water |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (microalgae)): 0.16 mg/l<br>Exposure time: 72 h<br>Method: OPP 123-3 (Algal Toxicity, Tiers I and II)<br>GLP: Yes<br>Remarks: Fresh water<br><br>NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.061 mg/l<br>Exposure time: 72 h<br>Method: OPP 123-3 (Algal Toxicity, Tiers I and II)<br>GLP: Yes<br>Remarks: Fresh water |
| M-Factor (Acute aquatic toxicity) | : | 1 |
| Toxicity to fish (Chronic toxicity) | : | NOEC: 0.002 mg/l<br>Exposure time: 33 Days |

Species: Danio rerio (zebra fish)
Method: OECD Test Guideline 210
GLP: Yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.012 mg/l
Exposure time: 21 Days
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
GLP: Yes
Remarks: Fresh water

M-Factor (Chronic aquatic toxicity) : 10

**Sulfonic acids, C13-17-sec-alkane, sodium salts:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 8.4 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 12.5 mg/l
Exposure time: 24 h
Remarks: Fresh water

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 96 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Fresh water

NOEC (Desmodesmus subspicatus (green algae)): 5.3 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : EC50: 2.9 mg/l
Exposure time: 21 Days
Species: Oncorhynchus mykiss (rainbow trout)
Method: OECD Test Guideline 204
Remarks: Fresh water

### 12.2 Persistence and degradability

**Components:**

**hydrogen peroxide:**

Biodegradability : Result: Readily biodegradable.
Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

**acetic acid:**

Biodegradability : Result: Readily biodegradable.

**peracetic acid:**

Biodegradability : Test Type: aerobic
Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 28 d
Method: OECD Test Guideline 301E

**Sulfonic acids, C13-17-sec-alkane, sodium salts:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 28 d
Method: OECD Test Guideline 301E

### 12.3 Bioaccumulative potential

**Components:**

**hydrogen peroxide:**

Partition coefficient: n-octanol/water : log Pow: -1.1

**acetic acid:**

Partition coefficient: n-octanol/water : log Pow: -0.17

**peracetic acid:**

Partition coefficient: n-octanol/water : log Pow: -0.46 (25 °C)
pH: 5
Method: OPPTS 830.7550

### 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.

### 12.6 Other adverse effects

**Product:**

Endocrine disrupting potential : 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.

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

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.

## SECTION 14: Transport information

### 14.1 UN number

**ADN** : UN 3149

**ADR** : UN 3149

**RID** : UN 3149

**IMDG** : UN 3149

**IATA** : UN 3149

### 14.2 UN proper shipping name

**ADN** : HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED

**ADR** : HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED

**RID** : 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)

**ADN** : 5.1

**ADR** : 5.1

**RID** : 5.1

**IMDG** : 5.1

**IATA** : 5.1

**14.4 Packing group**

**ADN**

Packing group : II
Classification Code : OC1
Hazard Identification Number : 58
Labels : 5.1 8






**ADR**

Packing group : II
Classification Code : OC1
Hazard Identification Number : 58
Labels : 5.1 8






Tunnel restriction code : (E)

**RID**

Packing group : II
Classification Code : OC1
Hazard Identification Number : 58
Labels : 5.1 8






**IMDG**

Packing group : II
Labels : 5.1 8






EmS Code : F-H, S-Q

**IATA (Cargo)**

Packing instruction (cargo aircraft) : 554 : 5.00 L
Packing group : II
Labels : 5.1 8

:







**IATA (Passenger)**

| | | |
|---|---|---|
| Packing instruction (passenger aircraft) | : | 550 : 1.00 L |
| Packing group | : | II |
| Labels | : | 5.1 8 |

:







## 14.5 Environmental hazards

**ADN**

Environmentally hazardous : yes



**ADR**

Environmentally hazardous : yes



**RID**

Environmentally hazardous : yes



**IMDG**

Marine pollutant : yes



**IATA (Passenger)**

Environmentally hazardous : yes



**IATA (Cargo)**
Environmentally hazardous : yes



**14.6 Special precautions for user**

Hazard and Handling Notes. : Oxidizing agent.
Corrosive.
Environmentally hazardous substance.
Has an intense odour.
Keep away from sources of heat.
Keep away from foodstuffs, acids and alkalis.

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.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

| | | |
|---|---|---|
| REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) | : | Conditions of restriction for the following entries should be considered: Number on list 3 |
| International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors | : | Not applicable |
| Regulation (EU) No 2024/590 on substances that deplete the ozone layer | : | Not applicable |
| Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors. | : | sulphuric acid |
| UK REACH List of substances subject to authorisation (Annex XIV) | : | Not applicable |
| GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation | : | Not applicable |

### 15.2 Chemical safety assessment

No data available

## SECTION 16: Other information

**Full text of H-Statements**

| | | |
|---|---|---|
| H226 | : | Flammable liquid and vapour. |
| H242 | : | Heating may cause a fire. |
| H271 | : | May cause fire or explosion; strong oxidizer. |
| H272 | : | May intensify fire; oxidizer. |
| H301 | : | Toxic if swallowed. |
| H302 | : | Harmful if swallowed. |
| H312 | : | Harmful in contact with skin. |
| H314 | : | Causes severe skin burns and eye damage. |
| H315 | : | Causes skin irritation. |
| H318 | : | Causes serious eye damage. |
| H319 | : | Causes serious eye irritation. |
| H331 | : | Toxic 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 |
| Skin Irrit. | : | Skin irritation |
| STOT SE | : | Specific target organ toxicity - single exposure |
| 2017/164/EU | : | Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values |
| GB EH40 | : | UK. EH40 WEL - Workplace Exposure Limits |
| 2017/164/EU / STEL | : | Short term exposure limit |
| 2017/164/EU / TWA | : | Limit Value - eight hours |
| GB EH40 / TWA | : | Long-term exposure limit (8-hour TWA reference period) |
| GB EH40 / STEL | : | Short-term exposure limit (15-minute reference period) |

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 Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air

Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Further information**

| **Classification of the mixture:** | | **Classification procedure:** |
|---|---|---|
| Org. Perox. G | | Based on product data or assessment |
| Met. Corr. 1 | H290 | Based on product data or assessment |
| Acute Tox. 4 | H302 | Based on product data or assessment |
| Acute Tox. 4 | H332 | Based on product data or assessment |
| Acute Tox. 4 | H312 | Based on product data or assessment |
| Skin Corr. 1B | H314 | Based on product data or assessment |
| Eye Dam. 1 | H318 | Based on product data or assessment |
| STOT SE 3 | H335 | Calculation method |
| Aquatic Chronic 2 | H411 | Calculation method |

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. 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 to be a guidance for processing and does not contain any 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. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

Relevant changes from the previous version are marked on the left side of the Safety Data Sheet with a black double bar in appropriate places.