SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1. Product identifier

Product name : PERACID
Product code: refer to sales department

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

Aqueous solution of Oxidising agents and bleaches
Sectors of use:
Industrial Manufacturing[SU3], Manufacture of food products[SU4], Public domain (administration, education, entertainment, services, craftsmen)[SU22]
Product category:
Washing and Cleaning Products (including solvent based products)
Process categories:
Use in batch and other process (syn- thesis) where opportunity for exposure arises[PROC4], Industrial spraying[PROC7], Transfer of substance or mixture (charging and discharging) at nondedicated facilities[PROC8A], Transfer of substance or mixture (charging and discharging) at dedicated facilities[PROC8B], Non industrial spraying[PROC11], Treatment of articles by dipping and pouring [PROC13], Brushing / scrubbing after spray application (trigger) or brushing / scrubbing with tools [PROC10]

Not recommended uses
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

AEB France Sarl
Siège social : 10 rue du stade 68240 Sigolsheim, France
Tél. +33 (0)389.47.32.33 - Fax +33 (0)389.47.33.34
E-mail: infofrance@aeb-group.com - Internet: www.aeb-group.com

Produit par :
AEB SpA
Via Vittorio Arici 104 S. Polo
25134 Brescia

1.4. Emergency telephone number

ORFILA + 33 (0)1 45 42 59 59

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS02, GHS05, GHS07, GHS09

Hazard Class and Category Code(s):
Org. Perox. F, Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A, Eye Dam. 1, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1

Hazard statement Code(s):
H242 - Heating may cause a fire.
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.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

The product is unstable and can catch fire in contact with heat sources
The product can be corrosive to metals

Corrosive product: causes severe skin burns and eye damage.
If inhaled, the product causes irritations to the respiratory tract.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.
The product is dangerous for the environment as it is very toxic to aquatic organisms
The product is dangerous to the environment as it is very toxic to aquatic life with long lasting effects

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
GHS02, GHS05, GHS07, GHS09 - Danger

Hazard statement Code(s):
H242 - Heating may cause a fire.
H290 - May be corrosive to metals.
H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage.
H335 - May cause respiratory irritation.
H410 - Very toxic to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):
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.
P260 - Do not breathe vapours/spray.
P280 - Wear protective gloves/clothing and eye/face protection.
Response
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P370+P378 - In case of fire: Use Spray Water to extinguish.
Disposal
P501 - Dispose of contents/container to local/regional/national/international regulations

Contains:
acetic acid, hydrogen peroxide, peracetic acid

Contains (Reg.EC 648/2004):
> 30% oxygen-based bleaching agents,< 5% phosphonates

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

Based on available data, there are no substances that interfere with the endocrine system in accordance with Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 in concentrations >0.1.

The use of this chemical agent implies the obligation of the "risk assessment" by the employer according to the provisions of Legislative Decree April 9, 2008 no. 81 and subsequent amendments. If the results of the risk assessment demonstrate that, in relation to the type, quantity, methods and frequency of exposure, there is only a low risk for the safety and irrelevant for the health of the workers and that the measures referred to in paragraph 1 of Legislative Decree April 9, 2008 no. 81 are sufficient to reduce the risk, the provisions of articles 225, 226, 229, 230 of the same Legislative Decree do not apply
Do not ingest. Keep out of reach of children.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Hydrogen peroxide	>= 20 < 25%	Ox. Liq. 1, H271; Acute Tox. 4, H302; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 3, H412 Limits: Skin Corr. 1A, H314 %C >=70; Skin Corr. 1B, H314 50<= %C <70; Skin Irrit. 2, H315 35<= %C <50; Eye Dam. 1, H318 8<= %C <50; Eye Irrit. 2, H319 5<= %C <8; STOT SE 3, H335 %C >=35; Ox. Liq. 1, H271 %C >=70; Ox. Liq. 2, H272 50<= %C <70; Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1 ATE oral = 693,700 mg/kg ATE inhal = 11,000 mg/l/4 h	008-003-00-9	7722-84-1	231-765-0	01-2119485845-22-XXXX
Acetic acid	>= 15 < 20%	Flam. Liq. 3, H226; Skin Corr. 1A, H314; Eye Dam. 1, H318 Limits: Skin Corr. 1A, H314 %C >=90; Skin Corr. 1B, H314 25<= %C <90; Skin Irrit. 2, H315 10<= %C <25; Eye Irrit. 2, H319 10<= %C <25;	607-002-00-6	64-19-7	200-580-7	01-2119475328-30-XXXX
Peracetic acid (B) (D)	>= 8 < 10%	EUH071; Org. Perox. D, H242; Acute Tox. 3, H301; Acute Tox. 2, H310; Skin Corr. 1A, H314; Acute Tox. 2, H330; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	607-094-00-8	79-21-0	201-186-8	01-2119531330-56-XXXX

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		Limits: STOT SE 3, H335 %C >=1; Acute toxicity M-factor = 10 Chronic toxicity M-factor = 100 ATE oral = 80,000 mg/kg ATE dermal = 60,000 mg/kg ATE inhal = 0,200 mg/l/4 h (dust/mist)				
Sulphuric acid (B)	>= 0,3 < 0,5%	Skin Corr. 1A, H314 Limits: Skin Corr. 1A, H314 %C >=15; Skin Irrit. 2, H315 5<= %C <15; Eye Irrit. 2, H319 5<= %C <15;	016-020-00-8	7664-93-9	231-639-5	01-2119458838-20-XXXX

SECTION 4. First aid measures

4.1. Description of first aid measures

In case of skin contact: Remove contaminated clothing immediately.
CONSULT A DOCTOR IMMEDIATELY.
Remove contaminated clothing immediately and dispose of it safely. In case of contact with skin, wash immediately with plenty of water and soap.
In case of eye contact: In case of contact with eyes, rinse with water for an adequate period of time, holding the eyelids open, then consult an ophthalmologist immediately. Protect the uninjured eye.
In case of ingestion: Do not give anything to eat or drink.
In case of inhalation: If breathing is irregular or stopped, administer artificial respiration.
In case of inhalation, seek medical advice immediately and show the packaging or label.

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

Harmful if swallowed, in contact with skin, or if inhaled. Causes severe skin burns and eye damage. May cause respiratory irritation.

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

In case of accident or discomfort, seek medical attention immediately (show instructions for use or safety data sheet if possible). Treatment: "Indicate any immediate medical attention and special treatment needed. Treatment: Treat symptomatically and supportively." Notes to the physician: Take the victim to the hospital immediately. Immediate medical attention is required. Consult an ophthalmologist immediately in all cases. Burns must be treated by a physician. If swallowed: Avoid gastric lavage (risk of perforation). Maintain medical supervision for at least 48 hours. The physician will decide on further medical care after a thorough examination of the injured person. Symptomatic treatment

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray, foam, dry powder, or carbon dioxide. Use extinguishing agent systems that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media: Do not use a full water jet to prevent the spread or spread of the fire. Organic compounds.
Extinguishing media that must not be used for safety reasons:
Do not use a full water jet to prevent the spread or spread of the fire. Organic compounds; Halogens and full water jet; IT IS RECOMMENDED NOT TO USE A full water jet as an extinguishing agent.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting: Contact with incompatible materials or exposure to temperatures above the SADT may cause a self-accelerating decomposition reaction, releasing flammable vapours that may ignite. The product burns violently. Flashback possible even at a considerable distance. Vapours may form explosive mixtures with air. Cool closed containers exposed to fire with water spray. Special hazards arising from the substance or mixture Specific fire hazards: WARNING: reignition may occur. Oxidising. The use of water spray may be ineffective unless used by experienced firefighters. Do not allow extinguishing agents to enter drains or watercourses. Hazardous decomposition products in the event of fire. Hazardous combustion products: The flame produces smoke containing hazardous combustion products (see Section 10). A fire often produces dense black smoke; exposure to decomposition products may be hazardous to health
Hazardous combustion products:
Decomposition/combustion products may include the following: carbon oxides, nitrogen oxides (NOx), sulphur oxides, phosphorus oxides, carbon dioxide, carbon monoxide and water.

5.3. Advice for firefighters

Protective equipment for firefighters: full-body flame-retardant protective gear. Self-contained breathing apparatus. Use standard methods for extinguishing chemical fires. Evacuate staff. Extinguish small fires with dry powder or carbon dioxide, then use water to prevent reignition. Containers exposed to high temperatures should be cooled with water and, if possible, removed from the affected area. Water used to extinguish the fire must not enter drains or watercourses; "Advice for firefighters Special protective equipment for firefighters: In the event of a fire, wear a self-contained positive-pressure full-face respirator and protective suit. Further information: Use water spray to cool closed containers. Collect contaminated water used for firefighting separately. This must not be discharged into the drains. Fire residues and fire-contaminated extinguishing water must be disposed of in accordance with local regulations. In the event of a fire and/or explosion, do not breathe fumes. Use a self-contained breathing apparatus (SCBA) with a chemical protective suit.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
For those not involved in the emergency response: Remove anyone not involved in the emergency from the affected area. Alert emergency responders or the fire brigade inside the building. If immediate action is required, refer to the guidelines/instructions for emergency personnel. Evacuate non-essential personnel and those not equipped with personal protective equipment. Prohibit all sources of sparks and ignition – do not smoke. Avoid contact with skin and

eyes and inhalation of vapours. Use personal protective equipment. In the event of inadequate ventilation, wear a suitable respirator.

6.1.2 For emergency responders:
Personal precautions, protective equipment and emergency procedures For first-aiders: wear suitable personal protective equipment: self-contained breathing apparatus or a full-face gas mask with a filter. Wear suitable protective clothing (acid-resistant). Keep the product and empty container away from sources of heat and ignition. Ensure adequate ventilation. Avoid contact with the substance or handling containers without adequate protection. Use water spray to reduce vapours or to redirect the movement of the cloud. Isolate the area until the substance has completely dispersed. Avoid contact with sources of ignition. Avoid direct contact with the product and do not breathe in fumes or vapours. Use the personal protective equipment described in section 8. Prohibit all sources of sparks and ignition – vapours. Use the personal protective equipment described in section 8. Prohibit all sources of sparks and ignition – No smoking. Avoid contact with skin and eyes and inhalation of vapours. Use personal protective equipment. In the event of inadequate ventilation, use a suitable respirator; refer to the safety measures listed in sections 7 and 8

6.2. Environmental precautions

Contain spills with earth or sand.
If the product has entered a watercourse, sewers or has contaminated soil or vegetation, notify the authorities.
Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

For containment: Absorb any spilled product using non-combustible absorbent materials and sweep up or remove with a shovel. "Methods and materials for containment and clean-up: Dike off the spill to prevent runoff from entering drains, sewers, watercourses, etc. Wet the spilled material with water and absorb with an inert absorbent material such as perlite, vermiculite or sand. Sweep up using non-sparking tools and place in a clean polyethylene drum or polyethylene bucket. DO NOT place in a steel container, lined or unlined, as decomposition may occur. Treat any contaminated cardboard packaging as hazardous waste. Wet the container with additional water before sealing it. Use absorbent material to solidify liquids. Clean up promptly by sweeping or vacuuming. Wear protective equipment, including eye protection, to avoid exposure (see Section 8 for specific handling precautions)"; "Large spill: stop the leak if there is no risk. Move containers away from the spill area. Use non-sparking tools and explosion-proof equipment. Approach the spill from upwind. Prevent entry into drains, watercourses, basements or confined spaces. Do not absorb with sawdust or other combustible material. It may pose a fire hazard when it dries. Wash spills into a wastewater treatment plant or proceed as follows. Contain and collect spills with non-combustible absorbent material, e.g. sand, earth, vermiculite or diatomaceous earth, and place in a container for disposal in accordance with local regulations (see Section 13). Spilled material may be neutralised with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal."; "Small spill: Pump into a recovery tank. Large spill: Contain, absorb with an inert absorbent and pump into an emergency tank. Do not use: cloth, sawdust, flammable materials. Never return spills to the original containers for reuse. Store in suitable, correctly labelled and sealed containers for disposal." ; Do not return recovered product to the original containers for possible reuse. Collect in suitable containers for disposal. Small quantities: Wipe up with inert absorbent material (clean sand). Do not contain. Use non-sparking tools. For clean-up: Methods and materials for containment and clean-up. Clean-up methods: Stop the leak if there is no danger. Isolate the waste material and prevent it from coming into contact with incompatible materials. For small spills, contain with sand or vermiculite and dilute the product at least 10 times with water. Transfer to a sealable container and take to a safe place for neutralisation* / disposal. For large spills, contain the leak and evacuate the area; wait until the reaction has ceased, then collect for disposal. Contact the local water management company / authorities if disposal via the sewer system is being considered. *NEUTRALISATION: once diluted, neutralise with a suitable alkaline substance such as sodium bicarbonate. Combustible materials exposed to this product must be immediately rinsed with large quantities of water to ensure that all the product is removed. Residual product left to dry on organic materials such as rags, clothing, paper, textiles, cotton, leather, wood or other combustibles may spontaneously ignite and cause a fire. Methods and materials for containment and clean-up Clean-up methods: Contact with incompatible substances may cause decomposition at or below the auto-accelerated decomposition temperature. Clean up spills immediately. Disperse gases/vapours/mists with water sprays. To clean the floor and all objects contaminated by this material, use plenty of water. Dry with inert absorbent material. Isolate waste

and do not reuse it. Non-sparking tools should be used. The handling and disposal of this material, as well as the materials and items used in cleaning up spills, may be subject to local or national regulations. The user is responsible for identifying the relevant regulations. Further information: Reference to other sections. For disposal considerations, see Section 13. For personal protection, see Section 8.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Risk of overpressure and explosion in the event of decomposition in closed containers and pipes. Handle in accordance with good industrial hygiene and safety practices. Wear personal protective equipment. Check that personal protective equipment is in good condition before use. Take ergonomic requirements into account when selecting personal protective equipment. Avoid contact with eyes, skin and clothing. Concentrations in the workplace must be kept below the specified limit values. If workplace limit values are exceeded and/or if large quantities are released (leaks, spills, dust), the specified respirator must be used. Do not inhale vapours, aerosols or atomised substances. Ensure good ventilation of the area. Change contaminated work clothing immediately. Wash contaminated clothing immediately with water. Avoid contamination and exposure to heat. Spilled product must never be returned to the original container for reuse. (Risk of decomposition.) Provide for the installation of an emergency shower and an eye wash station. Preparation of safety and usage instructions. Personal protective equipment used must comply with the requirements of Regulation (EU) 2016/425 and its amendments (CE marking). To be determined with reference to the workplace as part of a risk assessment in accordance with Regulation (EU) 2016/425 and its amendments

7.2. Conditions for safe storage, including any incompatibilities

Conditions for safe storage, including any incompatibilities Commercial product Storage and container requirements: Keep away from reducing agents. Keep away from strong bases. Keep away from combustible substances. Absorb spills to prevent damage to property. Keep out of the reach of children. Keep the container tightly closed. Store in appropriately labelled containers. If the container is not adequately ventilated, an explosion may occur due to overpressure caused by gas production. Store only in the original container, in a cool, well-ventilated place, protected from light and away from combustible materials and reducing agents (amines), acids, bases, heavy metal compounds (accelerators, drying agents, metal salts). Store on an acid-resistant floor. Do not seal the container airtight. Always transport and store containers in an upright position. Risk of overpressure and bursting in the event of decomposition in closed containers and pipes. Storage temperature: 0 °C to 30 °C; Always transport and store containers in an upright position.
Incompatible materials:
Store away from incompatible materials (see section 10 of the SDS).
Incompatible products: Strong oxidising agents Strong reducing agents Acids Bases Amines Heavy metal compounds Heavy metals
Sulphur compounds Rust, ash, dust (risk of self-accelerating exothermic decomposition) transition metal salts
; Store only in the original container, in a cool, well-ventilated place, protected from light and away from combustible materials and reducing agents (amines), acids, bases, heavy metal compounds (accelerators, drying agents, metal salts)

Premises requirements: PAA: Store in a cool, well-ventilated, clean, lockable area. Recommendation: Acid-resistant flooring. Use suitable venting devices on all packages, containers and tanks and check their proper functioning periodically. Do not confine the product in unventilated containers or behind closed valves. Risk of overpressure and explosion due to decomposition in confined spaces and pipes. Check containers and tanks at regular intervals for any unusual changes such as pressure build-up (swelling), damage or leaks. Transport and store the container only in an upright position. Do not empty the container under pressure. Always seal the container tightly after removing the product. Do not keep the container sealed. Always ensure the seal is intact. Avoid leaks. Open containers must be

carefully resealed and kept in an upright position to prevent leaks. Use only containers specifically authorised for: Peracetic acid. and/or Use only suitable materials for the transport, storage and installation of tanks. Storage requirements for areas and containers: Store only in the original container. Suitable container and packaging materials for safe storage: HDPE plastic container, polyethylene, glass. Unsuitable materials for containers: Metals. Store in a vented container. Keep in a designated area. Further information on storage conditions: Keep away from heat. Keep away from direct sunlight. Store in a cool place. Do not keep the container sealed. Recommended storage temperature: 0° - 30°C General storage advice: Do not store together with explosives, gases, oxidising solids, products that form flammable gases on contact with water, infectious products and radioactive products

7.3. Specific end use(s)

Industrial Manufacturing:
Handle with extreme caution.
Store in a well ventilated place away from heat sources. 0 °C a 30 °C

Manufacture of food products:
Handle with care.
Store in a clean, dry, ventilated area away from heat and direct sunlight.
Keep container tightly closed. 0 °C a 30 °C

Public domain (administration, education, entertainment, services, craftsmen):
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed. 0 °C a 30 °C

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

==========
Related to contained substances:
Hydrogen peroxide:
IFA-Gestis
Limit value – Eight hours
(ppm)/(mg/m3)
Australia 1/1,4
Austria 1/1,4
Belgium 1/1,4
Canada - Ontario 1/x
Canada - Québec 1/1,4
Denmark 1/1,4
Finland 1/1,4
France 1/1,5
Germany (AGS) 0,5/0,71
Germany (DFG) 0,5/0,71
Ireland 1/1,5
New Zealand 1/1,4
Norway 1/1,4
People's Republic of China x/1,5
Poland x/0,4
Singapore 1/1,4
South Africa 2/x
South Africa Mining 1/1,5
South Korea 1/x
Spain 1/1,4
Sweden 1/1,4
Switzerland 1/1,4
USA - NIOSH 1/1,4
USA - OSHA 1/1,4
United Kingdom 1/1,4

ACGIH® 2026
TWA (ppm)/(mg/m3):1/x
irrt (rspr- at- oclr- cute) A3

Limit value – Short term
(ppm)/(mg/m3)

Austria 2 (1)/2,8 (1) Remarks: (1) Ceiling limit value (5minutes)
Denmark 2/2,8
Finland 3 (1)/4,2 (1) Remarks: (1) 15 minutes average value
Germany (AGS) 0,5 (1)/0,71 (1) Remarks: (1) 15 minutes average value
Germany (DFG) 0,5 (1)/0,71 (1) Remarks: (1) 15 minutes average value
Ireland 2 (1)/3 (1) Remarks: (1) 15 minutes reference period
Poland x/0,8 (1) Remarks: (1) 15 minutes average value
South Africa Mining 2 (1)/3 (1) Remarks: (1) 15 minutes average value
Sweden 2 (1)/3 (1) Remarks: (1) 15 minutes average value
Switzerland 2 (1)/2,8 (1) Remarks: (1) 15 minutes average value
United Kingdom 2 (1)/2,8 (1) Remarks: (1) 15 minutes average value

Acetic acid:
Limit value - Eight hours
(ppm)/(mg/m³)

Australia 10/25
Austria 10 (1)/25 (1) Remarks: (1) Indicative Occupational Exposure Limit Values, proposual
Belgium 10/25
Canada - Ontario 10/x
Canada - Québec 10/25
Denmark 10/25
European Union 10/25
Finland 5/13
France 10/25
Germany (AGS) 10/25
Germany (DFG) 10/25
Hungary 10/25
Ireland 10/25
Italy 10/25
Japan (JSOH) 10/25
Latvia 10/25
New Zealand 10/25
Norway 10/25
People's Republic of China x/10
Poland x/ 25
Romania 10/25
Singapore 10/25
South Africa 20/x
South Africa Mining 10/25
South Korea 10/x
Spain 10/25
Sweden 5/13
Switzerland 10/25
The Netherlands 10/25
USA - NIOSH 10/25
USA - OSHA 10/25
United Kingdom 10/25

ACGIH® 2026
TWA (ppm)/(mg/m3) 10/x
STEL/C (ppm)/(mg/m3): 15/x
irrt (rspr: breathing; at: upper section; oclr: eye) fnpl

Limit value - Short term
(ppm)/(mg/m³)

Australia 15 (1)/37 (1) Remarks: (1) 15 minutes average value
Austria 20 (1) (2)/50 (1) (2) Remarks: (1) Indicative Occupational Exposure Limit Values, proposual (2) Ceiling limit value (5 minutes)
Belgium 15 (1)/38 (1) Remarks: (1) 15 minutes average value
Canada - Ontario 15/x
Canada - Québec 15 (1)/37 (1) Remarks: (1) 15 minutes average value
Denmark 20/50
European Union 20 (1)/50 (1) General remarks: Italic-type: Indicative occupational exposure limit value (IOELV) Remarks: (1) 15 minutes average value
Finland 10 (1)/25 (1) Remarks: (1) 15 minutes average value
France 20 (1)/50 (1) General remarks: Italics type: Indicative statutory limit values Remarks: (1) 15 minutes average value
Germany (AGS) 20 (1)/50 (1) Remarks: (1) 15 minutes average value
Germany (DFG) 20 (1)/50 (1) Remarks: (1) 15 minutes average value
Hungary 20 (1)/50 (1) Remarks: (1) 15 minutes average value
Ireland 20 (1)/50 (1) Remarks: (1) 15 minutes average value
Italy 20 (1)/50 (1) Remarks: (1) 15 minutes average value
Latvia 20 (1)/50 (1) Remarks: (1) 15 minutes average value
New Zealand 15 (1)/37 (1) Remarks: (1) 15 minutes average value
Norway 20 (1)/50 (1) Remarks: (1) 15 minutes average value
People's Republic of China x/20 (1) Remarks:(1) 15 minutes average value
Poland x/50 (1) Remarks: (1) 15 minutes average value
Romania 20 (1)/50 (1) Remarks: (1) 15 minutes average value
Singapore 15/37
South Africa 30 (1)/x Remarks: (1) 15 minutes average value
South Africa Mining 15 (1)/37 (1) Remarks: (1) 15 minutes average value
South Korea 15 (1)/x Remarks: (1) 15 minutes average value
Spain 20 (1)/50 (2) Remarks: (1) 15 minutes average value VLI (2) 15 minutes average value
Sweden 10 (1)/25 (1) Remarks: (1) 15 minutes average value
Switzerland 20/50
The Netherlands 20 (1)/50 (1) Remarks: (1) 15 minutes average value
USA - NIOSH 15 (1)/37 (1) Remarks: (1) 15 minutes average value
United Kingdom 20 (1)/50 (1) Remarks: (1) 15 minutes average value

Peracetic acid:
Limit value - Eight hours
(ppm)/(mg/m³)

Finland: 0,2/0,6
Germany (DFG): 0.1/0.316
Poland: x/0,8
Switzerland: 0,1/0,3

ACGIH® 2026
STEL/C (ppm)/(mg/m3): x/0,4 (IFV)
irrt (rspr; at: oclr, cute) A4

Limit value - Short term
(ppm)/(mg/m³)

Belgium: 0,4 (1)(2)/1,24 (1)(2) Remarks: (1) Inhalable fraction and vapour (2) 15 minutes average value
Canada – Ontario:0,4 (1)(2)/x Remarks: (1) Inhalable fraction and vapour (2) 15 minutes average value
Canada - Québec: 0,4 (1)(2)/x Remarks: (1) Inhalable fraction and vapour (2) 15 minutes average value
Germany (DFG): 0,1 (1)/0.316(1) Remarks: (1) 15 minutes average value
Finland: 0,5 (1)/1,5(1) Remarks: (1) 15 minutes average value
Ireland: 0,4 (1)(2)/x Remarks: (1) Inhalable fraction (2) 15 minutes average value
Poland: x/1,6(1) Remarks: (1) 15 minutes average value
Switzerland: 0,1 (1)/0,3 (1) Remarks: (1) 15 minutes average value

Sulphuric acid:
Limit value – Eight hours
(ppm)/(mg/m3)

Australia x/1
Austria x/0,1 (1) Remarks: (1) Inhalable fraction
x/0,05 (1) Remarks: (1) Thoracic fraction
Belgium x/0,2 (1) Remarks: (1) Additional indication "C" means that the agent falls within the scope of Title 2 concerning carcinogenic, mutagenic and reprotoxic agents of Book VI of the Codex on well-being at work.
Canada - Ontario x/0,2 (1) Remarks: (1) Thoracic aerosol
Canada - Québec x/0,2 (1) Remarks: (1) Thoracic fraction
Denmark x/0,05
European Union x/0,05 (1) General remarks: Italic-type: Indicative occupational exposure limit value (IOELV)
When selecting an appropriate exposure monitoring method, account should be taken of potential limitations and interferences that may arise in the presence of other sulphur compounds Remarks: (1) Thoracic fraction
Finland x/0,05 (1) Remarks: (1) thoracic fraction
France x/ 0,05 (1) General remarks: Italics type: Indicative statutory limit values Remarks: (1) Thoracic fraction
Germany (AGS) x/0,1 (1) Remarks: (1) inhalable aerosol
Germany (DFG) x/0,1 (1) Remarks: (1) Inhalable fraction
Hungary x/0,05
Ireland x/0,05
Israel x/0,3
Italy x/0,05 (1) (2) Remarks: (1) thoracic fraction (2) When selecting an appropriate method of exposure monitoring, the limitations and potential interference that may result from the presence of other phosphorus compounds should be taken into account
Latvia x/0,05
New Zealand x/0,1
Norway x/0,1 (1) Remarks: (1) Thoracic fraction
People's Republic of China x/1
Poland x/ 0,05 (1) Remarks: (1) Thoracic fraction
Romania x/0,05
Singapore x/1
South Africa x/0,4 (1) Remarks: (1) Thoraic fraction
South Africa Mining x/1
South Korea x/0,2 (1) Remarks: (1) Thoracic fraction
Spain x/0,05
Sweden x/0,1 (1) Remarks: (1) Inhalable fraction
Switzerland x/0,1 (1) Remarks: (1) Inhalable fraction
The Netherlands x/0,05 (1) Remarks: (1) Thoracic fraction
USA - NIOSH x/1
USA - OSHA x/1
United Kingdom x/0,05 (1) (2) Remarks:(1) Thoracic fraction (2) The UK Advisory Committee on Toxic Substances has expressed concern that, for the OELs shown in parentheses, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.

ACGIH® 2026
TWA (ppm)/(mg/m3): x/ 0,2 (T) A2
(M) fnpl (pulmonary emphysema)

Limit value - Short term
(ppm)/(mg/m³)

Astralia x/3 (1) Remarks: (1) 15 minutes average value
Austria x/ 0,2 (1) (2) Remarks: (1) Inhalable fraction (2) Ceiling limit value
Denmark x/0,1 (1) Remarks: (1) 15 minutes average value
Finland x/ 0,1 (1) (2) Remarks: (1) thoracic fraction (2) 15 minutes average value
France x/ 3 (2) (3) General remarks: Italics type: Indicative statutory limit values Remarks: (1) Thoracic fraction (2) Limit value is not prescribed by law, but comes from a Ministry of Labour circular. (3) 15 minutes average value
Germany (AGS) x/0,1 (1) (2) Remarks: (1) inhalable aerosol (2) 15 minutes average value
Germany (DFG) x/0,1 (1) (2) Remarks: (1) Inhalable fraction (2) 15 minutes average value
x/0,2 (1) (2) Remarks: (1) Inhalable fraction (2) Ceiling limit value
Japan (JSOH) x/1 (1) Remarks: (1) Ceiling limit value
People's Republic of China x/2 (1) Remarks: (1) 15 minutes average value
Singapore x/3
South Africa Mining x/3 (1) Remarks: (1) 15 minutes average value
South Korea x/0,6 (1) (2) Remarks: (1) Thoracic fraction (2) 15 minutes average value
Sweden x/0,2 (1) (2) Remarks: (1) Inhalable fraction (2) 15 minutes average value
Switzerland x/2 (1) (2) Remarks: (1) Inhalable fraction (2) 15 minutes average value

- Substance: Hydrogen peroxide
DNEL
Local effects Long term Workers inhalation = 1,4 (mg/m3)
Local effects Long term Consumers inhalation = 0,21 (mg/m3)
Local effects Short term Workers inhalation = 3 (mg/m3)
Local effects Short term Consumers inhalation = 1,93 (mg/m3)
PNEC
Sweet water = 0,013 (mg/l)
sediment Sweet water = 0,047 (mg/kg/sediment)
Sea water = 0,013 (mg/l)
sediment Sea water = 0,047 (mg/kg/sediment)
STP = 4,66 (mg/l)
ground = 0,002 (mg/kg ground)

- Substance: Acetic acid
DNEL
Local effects Long term Workers inhalation = 25 (mg/m3)
Local effects Long term Consumers inhalation = 25 (mg/m3)
Local effects Short term Workers inhalation = 25 (mg/m3)
Local effects Short term Consumers inhalation = 25 (mg/m3)
PNEC
Sweet water = 3,058 (mg/l)
sediment Sweet water = 11,36 (mg/kg/sediment)
Sea water = 0,3058 (mg/l)
sediment Sea water = 1,136 (mg/kg/sediment)
ground = 0,47 (mg/kg ground)

- Substance: Peracetic acid
DNEL
Local effects Long term Workers inhalation = 0,56 (mg/m3)
Local effects Long term Consumers inhalation = 0,28 (mg/m3)

Local effects Short term Workers inhalation = 0,56 (mg/m3)
Local effects Short term Consumers inhalation = 0,28 (mg/m3)
PNEC
Sweet water = 0,002 (mg/l)
STP = 0,051 (mg/l)
ground = 0,32 (mg/kg ground)

- Substance: Sulphuric acid
DNEL
Local effects Long term Workers inhalation = 0,05 (mg/m3)
Local effects Short term Workers inhalation = 0,1 (mg/m3)

8.2. Exposure controls

8.2.1 Appropriate technical controls:
Food industry:
No specific controls required (follow good practice and comply with the specific regulations applicable to the associated risk)

Industrial uses:
No specific controls required (follow good practice and specific regulations applicable to the associated risk)

Professional uses:
No specific controls required (follow good practice and specific regulations applicable to the associated risk)

8.2.2 Personal protective measures:

a) Eye/face protection
Close-fitting safety goggles. Wear a face shield and protective clothing in the event of abnormal processing conditions. Eye/face protection (EN 166): Goggles with side shields. Protective visor

b) Skin protection

i) Hand protection
Nitrile rubber Permeation time: 30 min Glove thickness: 0.40 mm Guideline: Equipment must comply with EN 374 Material: Butyl rubber Permeation time: 120 min Glove thickness: 0.70 mm Guideline: Equipment must comply with EN 374 Remarks: The data regarding permeation time/material resistance are standard values! The exact permeation times/material resistance must be obtained from the protective glove manufacturer. The finish of protective gloves for use with chemicals must be selected based on the concentration and quantity of hazardous substances anticipated for each task. For specific applications, it is recommended to define the specific chemical resistance with the work glove manufacturer. Wash hands before breaks and at the end of the working day.

ii) Other
During work operations, in accordance with the instructions of the person in charge (employer, Health and Safety Manager, etc.), wear skin-protective clothing (general-purpose/acid-resistant workwear, safety footwear or other prescribed equipment).

c) Respiratory protection
Control measures Appropriate technical controls - Ensure adequate ventilation. - Implement the necessary technical measures to ensure occupational exposure limits are not exceeded. Respiratory protection: In the event of dust or aerosol formation, use a respirator with an approved filter. Respiratory protection with integrated dust/particle filter (EN 141) Filter type: Filter - ABEK

d) Thermal hazards
No hazards to report

8.2.3 Environmental exposure controls:
Use in accordance with good working practices, avoiding the release of the product into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Clear liquid	
Colour	Colorless	
Odour	pungent	
Odour threshold	not determined as considered not relevant for the characterization of the product	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Boiling point or initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flammability	not determined as considered not relevant for the characterization of the product	
Lower and upper explosion limit	not determined as it is considered irrelevant for the characterization of the product	
Flash point	>96°C ASTMD3278 Setaflash	Method: Does not support combustion
Auto-ignition temperature	280.00 °C according to DIN 51 794	Method: Not applicable. It decomposes below its boiling point
Decomposition temperature	75.00 °C	Method: SADT (Self-accelerating decomposition temperature) 50 kg pack
pH	<3.0 (20°C); 3,5 ± 0,5 (20°C; sol. 1%)	
Kinematic viscosity	<= 14 mm2/s (40 °C)	
Solubility	Water solubility: 1,000 g/l (20 °C) completely miscible solubility in other polar and non-polar sol	
Water solubility	soluble	
Partition coefficient n-octanol/water (log value)	log Pow: -0.52 measured as peracetic acid	
Vapour pressure	> 14 hPa (20°C)	
Density and/or relative density	1.12 - 1.13	
Relative vapour density	not determined as it is considered irrelevant for the characterization of the product	
Particle characteristics	not determined as considered not relevant for the characterization of the product	

9.2. Other information

Volatile Organic Compounds (VOCs) = 25.80%

9.2.1 Information with regard to physical hazard classes

Explosive properties: Has no explosive properties - EEC Guideline 92/69

Method: Has no explosive properties - EEC Guideline 92/69

Oxidising properties: Not classified as an oxidiser. UN Test O.2

Method: Not classified as an oxidiser. UN Test O.2.

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity

10.1. Reactivity

Exothermic reaction with bases. Reactivity: Stable under normal conditions of use. Decomposes upon heating. Potential exothermic hazard.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Risk of overpressure and bursting if decomposed in closed containers and pipes. Risk of decomposition if incompatible substances, contaminants, metals, alkalis, reducing agents come into contact. Release of oxygen may promote fires. Decomposes if exposed to light. Do not mix with bleach or other chlorinated products – may release chlorine gas. Avoid amines. Possibility of hazardous reactions. Contact with the product, impurities, decomposition catalysts, metal salts, alkalis, reducing agents can lead to self-accelerating exothermic decomposition and the formation of oxygen. Risk of overpressure and bursting if decomposed in confined spaces and pipes. Release of oxygen may promote combustion.

10.4. Conditions to avoid

Conditions to avoid: Heat. Direct heat sources. Exposure to sunlight. Exposure to light. Freezing temperatures. Do not mix with chlorinated products. Avoid exposure to light and sunlight.

10.5. Incompatible materials

Bases
Metals
Organic substances
Mild steel
Aluminium
Acids
Bases
Granulated metal salts
Metals
Reducing agents
Flammable materials
Organic substances
Heavy metal salts; Chlorinated products. Decomposition catalysts, alkalis, reducing agents, iron, galvanised steel; Brass, copper, aluminium, iron, zinc

10.6. Hazardous decomposition products

Steam, Oxygen, Acetic acid; At elevated temperatures, hazardous decomposition products may be produced, such as fumes, carbon dioxide and carbon monoxide, nitrogen oxides

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

a) Acute toxicity The product is classified as: Acute Tox. 4(H302), Acute Tox. 4(H312), Acute Tox. 4(H332)
b) Skin corrosion/irritation The product is classified as: Skin Corr. 1A(H314)
c) Serious eye damage/serious eye irritation
The product is classified as: Eye Dam. 1(H318)
d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met.
e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met.
f) carcinogenicity Not classified
Based on available data, the classification criteria are not met.
g) reproductive toxicity Not classified
Based on available data, the classification criteria are not met.
h) specific target organ toxicity (STOT) — single exposure
The product is classified: STOT SE 3(H335)
i) Specific target organ toxicity
(STOT) — repeated exposure
Not classified
Based on available data, the classification criteria are not met.
j) Aspiration hazard Not classified
Based on available data, the classification criteria are not met.

Toxicological information regarding the main substances present in the product

(a) acute toxicity: Hydrogen peroxide: Ingestion - LD50 rat (mg/kg/24h bw): 693 - 1.026 mg/kg (H_2O_2 70%) - risk of mouth, esophagus and stomach burns. For rapid oxygen release: Risk of stomach distension and haemorrhage with the possibility of serious injury, In animals: (as aqueous solution). LD50/Rat: 1,200 mg/kg (35%) - ATE value of 431 mg/kg.

Skin contact - Rabbit LC50 (mg/kg/24h bw): Irritating to skin. On the animal: aqueous solution. Irritating to skin. Superficial necrosis (After semi-occlusive contact, Rabbit, Exposure time: 4 h 35%) Corrosive to the skin. On humans: Effects of skin contact may include: discoloration, erythema, oedema. ATE value of 6500 mg/kg

Inhalation - LC50, 4 h, rat , > 0.17 mg/l, vapor (H_2O_2 50%) at high vapor concentrations/mists (technically maximum possible concentration 50%) At high vapor concentrations / mists: Risk of pulmonary edema, Delayed effects are possible. St

Acetic acid: LLD50 Oral Rat 3310 mg/kg bw
LC50 Inhalation of vapours Rat 40 mg/l 4h
Peracetic acid: LD50 Oral 80 mg/kg bw
LC50 dust/mist 0.2 mg/m3
LD50 Skin > 60 mg/kg bw
Sulphuric acid: Ingestion - LD50 rat (mg/kg/24h bw): 2140 Skin contact - LC50 rat/rabbit (mg/kg/24h bw): nd Inhalation - LD50 rat (mg/m^3/8h): nd

(b) skincorrosion/irritation: Corrosive product: causes severe skin burns and eye damage.
Hydrogen peroxide: Corrosive to the skin (after semi-occlusive contact, on rabbit, exposure time: 1 - 4 h) (50%) Corrosive to the skin (after semi-occlusive contact, on rabbit, exposure time: 3 min) (50 - 70%).
Acetic acid: Corrosive
Peracetic acid: Corrosive
Sulphuric acid: Corrosive
Hydrogen peroxide: Corrosive to the skin (after semi-occlusive contact, on rabbit, exposure time: 1 - 4 h) (50%) Corrosive to the skin (after semi-occlusive contact, on rabbit, exposure time: 3 min) (50 - 70%).
Acetic acid: Irritating
Peracetic acid: Irritating
Sulphuric acid: Irritating

(c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage. - If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.
Hydrogen peroxide: Corrosive to the eyes (H_2O_2> 35%)
Acetic acid: Corrosive
Peracetic acid: Corrosive
Sulphuric acid: Corrosive
Hydrogen peroxide: Corrosive to the eyes (H_2O_2> 35%)
Acetic acid: Irritating
Peracetic acid: Irritating
Sulphuric acid: Irritating

(d) respiratoryorskinsensitisation: Hydrogen peroxide: Does not cause sensitization on laboratory animals (guinea pig)
Acetic acid: Based on available data, the classification criteria are not met.
Peracetic acid: It does not cause sensitization.
Sulphuric acid: Based on available data, the classification criteria are not met.

(e) germ cell mutagenicity: Hydrogen peroxide: Mutagenicity: According to available experimental data : Non-genotoxic In vitro Active In vivo In vivo mouse micronucleus test: Inactive (Method: OECD Test Guideline 474) DNA repair test on rat hepatocytes: Inactive (Method : OECD Test Guideline 486)
Acetic acid: Based on available data, the classification criteria are not met.
Peracetic acid: Based on available data, the classification criteria are not met.
Sulphuric acid: Based on available data, the classification criteria are not met.

(f) carcinogenicity: Hydrogen peroxide: Experimentation on animals has not shown clear evidence of carcinogenic effect. Target Organs: duodenum, carcinogenic effect. Dermal, Prolonged exposure, mouse, Animal testing did not show any carcinogenic effects. Did not show carcinogenic effects in animal experiments. Topical applications do not produce skin tumors. Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).
Acetic acid: Based on available data, the classification criteria are not met.
Peracetic acid: Based on available data, the classification criteria are not met.
Sulphuric acid: Based on available data, the classification criteria are not met.

(g) eproductivetoxicity: Hydrogen peroxide: Based on the available data, it cannot be assumed that the substance has a reprotoxic potential
Acetic acid: Based on available data, the classification criteria are not met.
Peracetic acid: Based on available data, the classification criteria are not met.
Sulphuric acid: Based on available data, the classification criteria are not met.
(h) specific target organ toxicity (STOT) single exposure: If inhaled, the product causes irritations to the respiratory tract.
Hydrogen peroxide: At high vapour/fog concentrations: Irritating to respiratory system. (> 200 ppm). Inhalation, mice, 665 mg/m3 Remarks: RD 50, Irritating to respiratory system, H2O2 50%.
Acetic acid: Based on available data, the classification criteria are not met.
Peracetic acid: STOT SE 3, H335. C = 1% Respiratory Tract.
Sulphuric acid: Based on available data, the classification criteria are not met.
(i) specific target organ toxicity (STOT) repeated exposureHydrogen peroxide: Repeated Exposure: Studies of prolonged exposure in animals have not shown any toxic effects. • In animals : Oral: Irritation of gastric mucosa, NOAEL= 26mg/kg/d (Rat, 3 months) (drinking water) inhalation: Irritation of upper respiratory tract, Irritating to nose, Local effects related to an irritant effect, LOAEL = 0.0029 mg/l (Method: OECD Test Guideline 407, Rat, Repeated)
Acetic acid: Based on available data, the classification criteria are not met.
Peracetic acid: Based on available data, the classification criteria are not met.
Sulphuric acid: Based on available data, the classification criteria are not met.
(j) aspiration hazard: Hydrogen peroxide: Not available
Acetic acid: Based on available data, the classification criteria are not met.
Peracetic acid: Based on available data, the classification criteria are not met.
Sulphuric acid: Based on available data, the classification criteria are not met.

==========
Related to contained substances:
Hydrogen peroxide:
LD50 (rat) Oral (mg/kg body weight) = 693,7
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 11

Peracetic acid:
LD50 (rat) Oral (mg/kg body weight) = 80
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 60
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,2

11.2. Information on other hazards

100% w/w peracetic acid is classified in Category 2 (H310: Fatal in contact with skin). Neither hydrogen peroxide nor acetic acid are classified for acute dermal toxicity in Annex 6 of the CLP Regulation or in the C&L Inventory and therefore need not be taken into account. The dermal ATE for pure peracetic acid is 60 mg/kg body weight. However, studies with mixtures are available which may be used in accordance with bridging principles, and the following text is included in the RAC opinion of 02/06/2022: Based on the results obtained in rabbits, the classification of the aforementioned formulations (PAA conc. 4.89–11.69%) as Acute Toxicity 4 with the hazard statement H312 is justified: ‘Harmful in contact with skin’ in accordance with the criteria of the CLP Regulation (reference value 1000 < ATE ≤ 2000 mg/kg body weight). Therefore, products with a concentration of up to 11.69% peracetic acid may still be classified in Category 4.

11.2.1. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the endocrine system in accordance with Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 in concentrations >0.1.

SECTION 12. Ecological information

12.1. Toxicity

==========

Related to contained substances:
Hydrogen peroxide:
Acute toxicity EC50 static test Activated sludge (Bacteria) 466 mg/l - 30 min (HP 100%) Acute toxicity ErC50, 72 h (Skeletonema costatum): 1.6 (1.6 - 5) mg/l. 1,38 mg/l (growth rate)
Marine environment Acute toxicity EC50 Skeletonema costatum (Algae): 2,62 mg/l (HP 100%) Growth rate, 72 h
Acute toxicity EC50 Crustaceans (Daphnia pulex 48h) : 2, 4 mg/l, fresh water, semi-static test (HP100%)
NOEC Repro test. Daphnia magna (Crustacean): 0.63 mg/l - 21 d (HP100%)
Acute toxicity LC50 fish (Pimephales promelas): 16.4 (16.4 - 37.4) mg/l - (HP100%) (US EPA, pH: 6.6 - 7.2)
NOEC, fish (Pimephales promelas): NOEC, 96 h, 5 mg/l (Pure substance)
NOEC Chronic Toxicity Fish: 38.5 mg/l 7 days (Chronic Toxicity Fish)
Acute toxicity M-factor = 1
Chronic toxicity M-factor = 1

Acetic acid:
Acute aquatic toxicity: LC50 Fish Oncorhynchus mykiss > 300.82 mg/L 96h - OECD 203
Acute aquatic toxicity: EC50 Invertebrate Daphnia magna > 300.82 mg/L 48h - OECD 202 Toxicity to plants: EC50 Algae Skeletonoma costatum > 300.82 mg/L 72h - ISO 10253
Acute toxicity M-factor = 1
Chronic toxicity M-factor = 1

Peracetic acid:
Acute aquatic toxicity: LC50 Fish Oncorhynchus mykiss 0.53 mg/L 96h - OECD 203
Chronic aquatic toxicity: NOEC Fish Danio rerio 0.001 mg/L 33d - OECD 201
Acute aquatic toxicity: EC50 Invertebrate Daphnia magna 0.73 mg/L 48h - OECD 202
Chronic aquatic toxicity: NOEC Invertebrate Daphnia magna 0.012 mg/L 21d - OECD 211 Toxicity to plants: EC50 Algae Pseudokirchneriella subcapitata 0.16 mg/L 72h - EPA OPP 123-3
Toxicity to plants: EC10 Algae Pseudokirchneriella subcapitata 0.061 mg/L 72h - EPA OPP 123-3
Acute aquatic toxicity: EC50 Invertebrate Mytilus edulis 0.27 mg/L 48h
C(E)L50 (mg/l) = 0,16 Acute toxicity M-factor = 10
NOEC (mg/l) = 0,001 Chronic toxicity M-factor = 100

Sulphuric acid:
Acute aquatic toxicity: LC50 Fish Lepomis macrochirus > 16 mg/L 96h
Chronic aquatic toxicity: NOEC Fish Jordanella floridae 0.025 mg/L - 65d
Acute aquatic toxicity: EC50 Invertebrate Daphnia magna > 100 mg/L 48h - OECD 202 Chronic aquatic toxicity: NOEC Invertebrate Tanytarsus dissimilis 0.15 mg/L - 35d
oxicity to plants: EC50 Algae Desmodesmus subspicatus > 100 mg/L 72h - OECD 201
Acute toxicity M-factor = 1
Chronic toxicity M-factor = 1

The product is dangerous for the environment as it is very toxic to aquatic organisms following acute exposure.

Use according to good working practices and avoid to disperse the product into the environment.

12.2. Persistence and degradability

==========
Related to contained substances:
Hydrogen peroxide:
Abiotic degradation: air, indirect photooxidation, t 1/2 24 h Conditions: sensitizing agent: OH radical. Water, redox, t 1/2 120 h Conditions: mineral and enzymatic catalysis, fresh water, brackish water. Soil, redox, t 1/2 12 h Conditions: mineral and enzymatic catalysis. Biodegradation: aerobic, t 1/2, < 2 min Conditions: biological sewage sludge Readily biodegradable. Aerobic, t 1/2, 0.3 - 5 d Conditions: fresh water Readily biodegradable. Anaerobic Conditions: Soil/sediment not applicable. Aerobic, t 1/2, 12 h Conditions: Soil Readily biodegradable. Readily Biodegradable (28 Days – OECD TG 301 E)

Acetic acid:
Rapidly degradable Test: Oxygen consumption Notes: 96% / 20d

Peracetic acid:
Rapidly degradable Test: Dissolved organic carbon Notes: 98% / 28d, OECD 301E

Sulphuric acid:
Not available

12.3. Bioaccumulative potential

==========
Related to contained substances:
Hydrogen peroxide:
Not bioaccumulative. Rapid n-otanol/water degradation Log Kow: -1.57

Acetic acid:
Not bioaccumulative Test: BCF - Bioconcentration factor; Value: 3.16 Notes: QSAR Not bioaccumulative Test: Kow - Partition coefficient; Value: -0.17

Peracetic acid:
Not bioaccumulative Test: Kow - Partition coefficient; Value: -0.26 Notes: QSAR

Sulphuric acid:
Not available

12.4. Mobility in soil

==========
Related to contained substances:
Hydrogen peroxide:
Soil-Water: important solubility and mobility Soil/sediment, log KOC:0,2 evaporation and adsorption not significant. Air, Volatility, Henry's constant, = 0.75 kPa.m³/mol Conditions: 20 °C not significant. Surface tension: 75.7 mN/m % 20 °C /50 %.

Acetic acid:
Non-mobile Test: Log Koc; Value: 0.062 Notes: QSAR

Peracetic acid:
Not applicable due to the rapid degradation of peracetic acid in the environment

Sulphuric acid:
Not available

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the endocrine system in accordance with Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 in concentrations >0.1.

12.7. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648
The (I) surfactant (s) content (s) in this preparation complies (comply) with (i) the biodegradability criteria as laid down in Regulation CE/648/2004 on detergents. All data are held at the disposal of the competent authorities of Member States and will be provided, at their direct request or at the request of a detergent manufacturer, to those authorities.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Recover if possible. Send to authorized disposal facilities or for incineration under controlled conditions. Operate in accordance with current local and national regulations.
Additional disposal information:
Dispose of contents/container in a hazardous waste container. Due to the high risk, recovery is not recommended. Dispose of waste and packaging in accordance with the relevant waste management regulatory authorities and waste disposal regulations (likely combustion). Empty containers may contain product residues. Follow all warnings, even after emptying the container. Packaging must not be reused. Correct waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

SECTION 14. Transport information

14.1. UN number or ID number

ADR/RID/IMDG/ICAO-IATA: 3109

If subject to the following characteristics is ADR exempt:
Combination packagings: per inner packaging 125 ml per package 30 kg
Inner packaging placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 125 ml per package 20 kg

14.2. UN proper shipping name

ADR/RID/IMDG: PEROSSIDO ORGANICO DI TIPO F, LIQUIDO (ACIDO PEROSSIACETICO, TIPO F, STABILIZZATO, C≤43%)
ADR/RID/IMDG: ORGANIC PEROXIDE TYPE F, LIQUID (Peroxyacetic Acid, type F, stabilized) C≤43%
ICAO-IATA: ORGANIC PEROXIDE TYPE F, LIQUID (Peroxyacetic Acid, type F, stabilized) C≤43%

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 5.2
ADR/RID/IMDG/ICAO-IATA: Label : 5.2 + 8 + ENVIRONMENTALLY HAZARDOUS
ADR: Tunnel restriction code : D
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 125 ml
IMDG - EmS : F-J, S-R

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: --

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous
IMDG: Marine polluting agent : Yes

14.6. Special precautions for user

The transport must be carried out by authorized vehicles for the transport of dangerous goods in accordance with the requirements of the applicable Edition of the agreement A.D.R. and national provisions. The transport must be carried out in the original packaging and in packages that are made from materials resistant to content and not likely to generate with this dangerous reactions. The process of loading and unloading of dangerous goods have received adequate training on the risks presented by prepared and on possible procedures to be taken in the event of emergency situations

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

Restrictions relating to the product or the substances contained (Annex XVII EC Reg. 1907/2006): not applicable
Substances in Candidate list (art. 59 EC Reg. 1907/2006): the product does not contain SVHC in percentage = a 0.1 %.

Regulation (EC) 648/04: see point 2.2
Regulation (EU) 528/2012: see point 2.2

Seveso category:
P6b - SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES
E1 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste:
HP6 - Acute Toxicity
HP8 - Corrosive

HP14 - Ecotoxic

15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the following substances:
Hydrogen peroxide
Acetic acid
Peracetic acid
Sulphuric acid

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 4.1. Description of first aid measures, 4.2. Most important symptoms and effects, both acute and delayed, 4.3. Indication of any immediate medical attention and special treatment needed, 5.1. Extinguishing media, 5.2. Special hazards arising from the substance or mixture, 5.3. Advice for firefighters, 6.1. Personal precautions, protective equipment and emergency procedures, 6.3. Methods and material for containment and cleaning up, 7.1. Precautions for safe handling, 7.2. Conditions for safe storage, including any incompatibilities, 7.3. Specific end use(s), 8.1. Control parameters, 10.1. Reactivity, 10.2. Chemical stability, 10.3. Possibility of hazardous reactions, 10.4. Conditions to avoid, 10.5. Incompatible materials, 10.6. Hazardous decomposition products, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 11.2. Information on other hazards, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 12.6. Endocrine disrupting properties, 13.1. Waste treatment methods, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of hazard statements set out in paragraph 3
H271 = May cause fire or explosion; strong oxidiser.
H302 = Harmful if swallowed.
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.
H412 = Harmful to aquatic life with long lasting effects.
H226 = Flammable liquid and vapour.
H242 = Heating may cause a fire.
H301 = Toxic if swallowed.
H310 = Fatal in contact with skin.
H330 = Fatal if inhaled.
H410 = Very toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H242 - Heating may cause a fire. Classification procedure: On basis of test data
H290 - May be corrosive to metals. Classification procedure: On basis of test data
H302 - Harmful if swallowed. Classification procedure: Calculation method
H312 - Harmful in contact with skin. Classification procedure: On basis of test data
H314 - Causes severe skin burns and eye damage. Classification procedure: Calculation method
H318 - Causes serious eye damage. Classification procedure: Calculation method
H332 - Harmful if inhaled. Classification procedure: Calculation method
H335 - May cause respiratory irritation. Classification procedure: Calculation method
H400 - Very toxic to aquatic life. Classification procedure: Calculation method

H410 - Very toxic to aquatic life with long lasting effects. Classification procedure: Calculation method

Main normative references:
Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.
Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.
Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable
n.d.: not available
ADR: Accord europèen relative au transport International des merchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE: Acute Toxicity Estimat
BFC: BioconCentration Factor
BOD: Biochemical Oxigen Demand
CAS: Chemical Abstract Service number
CAP: Centre AntiPoison
CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified Chemical Substances)
CL50/LC50: Lethal Concentration 50
DL50/LD50: Lethal Dose 50
COD: Chemical Oxygen Demand
DNEL: Derived No Effect Level
EC50: half maximal Effective Concentration
ERC: Enviroment Release Classes
EU/UE: European Union
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods code
Kow: Octanol water partition coefficient
NOEC: No Observed Effect Concentration
OEL: Occupational Exposure Limit
PBT: Persistent Bioaccumulative and Toxic
PC: Product Categories
PNEC: Predicted No Effect Concentration
PROC: Process Categories
RID: Règlement concernent le transport International ferroviaire des merchandises dangereuses (Regulations concerning International rail transport of dangerous goods)
STOT: Target Organ Systemic Toxicity
STOT (RE): Repeated Exposure
STOT (SE): Single Exposure
STP: Sewage Treatment Plants
SU: Sector of Use
SVCH: Substance of Very High Concern
TLV: Threshold Limit Value
vPvB: Very Persistent Very Bioaccumulative

References and Sources:
- ECHA Registered Substances:
https://chem.echa.europa.eu/

- SDS raw material supplier

- GESTIS International Limit Value: http://limitvalue.ifa.dguv.de

This msds was made in good faith by technical Office on the basis of the information available at the date of the last revision. The person in charge must regularly inform the employees about the specific risks they encounter when using this substance/product. The information contained here relate only to the substance/the preparation indicated and may not apply if the product is used improperly or in combination with others. Nothing contained herein shall be construed as a guarantee, either express or implied. It is the responsibility of the user to ensure the opportunities and completeness of the information contained herein for their own particular use.

*** this tab annuls and replaces any previous edition. (IIXX)

Changes from the previous edition: alignment with Delegated Regulation (EU) 2024/2564

SUMI

Safe Use of Mixtures Information

AISE_SUMI_IS_4_1

Version 1.1, August 2018

Industrial uses; Automated task; Semi-automated task; Dedicated equipment

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

The SUMI applies to industrial uses where products are used in closed process where opportunity for exposure arises. This Safe Use Information is based on the **AISE_SWED_IS_4_1**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

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Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.
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SUMI

Safe Use of Mixtures Information

AISE_SUMI_IS_7_5

Version 1.1, August 2018

Industrial spraying; Automated task; Open system; Long term

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

The SUMI applies to industrial spraying products. This Safe Use Information is based on the **AISE_SWED_IS_7_5**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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SUMI

Safe Use of Mixtures Information

AISE_SUMI_IS_8b_1

Version 1.1, August 2018

Transfer and dilution of concentrated product by using dedicated dosing system

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to industrial uses where products are transferred to or diluted in a dedicated dosing system. This Safe Use Information is based on the **AISE_SWED_IS_8b_1_L** and **AISE_SWED_IS_8b_1_S**

Operational Conditions

Maximum duration	60 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	Wear suitable gloves. See section 8 of the SDS of this product for specifications. 
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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SUMI

Safe Use of Mixtures Information

AISE_SUMI_IS_10_2

Version 1.1, August 2018

Brushing; Automated task

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to industrial uses where the product is used in an automated brushing task. This Safe Use Information is based on the **AISE_SWED_IS_10_2**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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SUMI

Safe Use of Mixtures Information

AISE_SUMI_IS_13_4

Version 1.1, August 2018

Industrial uses; Treatment of articles by dipping or pouring

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to industrial uses where articles are treated by dipping or pouring. This Safe Use Information is based on the **AISE_SWED_IS_13_4**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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SUMI

Safe Use of Mixtures Information

AISE_SUMI_PW_4_1

Version 1.1, August 2018

Professional uses; Semi-closed system

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

The SUMI applies to professional uses where products are used in closed process where opportunity for exposure arises. This Safe Use Information is based on the **AISE_SWED_PW_4_1**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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SUMI

Safe Use of Mixtures Information

AISE_SUMI_PW_8a_1_G

Version 1.1, August 2018

Transfer of product to a container (bottle/bucket/machine)

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to professional uses where the product is transferred to or diluted in a container, such as a dispenser, bottle or bucket. Safe Use Information is based on the **AISE_SWED_PW_8a_1_L** and **AISE_SWED_PW_8a_1_S**.

Operational Conditions

Maximum duration	60 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	Wear suitable gloves and eye protection. See section 8 of the SDS of this product for specifications. 
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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where

SUMI

Safe Use of Mixtures Information

AISE_SUMI_PW_10_1

Version 1.1, August 2018

Professional uses; Brushing after trigger spraying or brushing with tools

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to professional uses where the product is brushed on a surface, with limited exposure to the hands, either after trigger spraying or through the use of tools such as a mop. This Safe Use Information is based on the **AISE_SWED_PW_10_1**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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SUMI

Safe Use of Mixtures Information

AISE_SUMI_PW_11_4

Version 1.1, August 2018

Professional uses; Spraying

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to professional uses of products in a spraying application. This Safe Use Information is based on the **AISE_SWED_PW_11_4**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.
If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.
Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.
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SUMI

Safe Use of Mixtures Information

AISE_SUMI_PW_13_2

Version 1.1, August 2018

Professional uses; Treatment of articles by dipping, soaking or pouring

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to professional uses where articles are treated by dipping or pouring. This Safe Use Information is based on the **AISE_SWED_PW_13_2**.

Operational Conditions

Maximum duration	60 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. **Don't smoke.** **Don't use in proximity of open flame.**	
Wash hands after use. **Avoid contact with damaged skin.** **Do not mix with other products.**	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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WORKING ISTRUCTION TABLE

IMPROVEMENT THROUGH BIOTECHNOLOGY

This tab provides instructions for appropriate and safe use of products and proper management of emergency situations for cleaning staff/users.

Attached to MSDS rel#12 del 04/16/2026

Use description	Use in batch and other process (syn- thesis) where opportunity for exposure arises [PROC4], Industrialspraying [PROC7], Transfer of substance or mixture (charging and discharging) at dedicated facilities [PROC8B], Transfer of substance or mixture (charging and discharging) at nondedicated facilities [PROC8A], Application with rollers or brushes [PROC10], Non industrial spraying[PROC11], Treatment of articles by dipping and pouring [PROC13]
Product name	**PERACID**
Classification of the product (100%)	H242 - Heating may cause a fire. 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. H318 - Causes serious eye damage. H335 - May cause respiratory irritation. H400 - Very toxic to aquatic life. H410 - Very toxic to aquatic life with long lasting effects. EUH071 - Corrosive to the respiratory tract.
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (1%) the product is classified: H411 -Toxic to aquatic life with long lasting effects
Handling of the product (100%)	Avoid contact and inhalation of vapors Wear protective gloves/clothing and eye/face protection. At work do not eat or drink.
Handling of the diluted product	Avoid contact and inhalation of vapors At work do not eat or drink.
DPI required concentrated product (racking, concentrated use, spillage…)	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN166)
Diluited product	No DPI required for intended uses

In case of emergency (accidents involving exposure to the product)	Immediately inform the customer. Immediately inform the employer. Contact Poisons Centres tel. number in 1.4 section of the MSDS
Accidental release large quantities measures: concentrated product	Wear gloves, mask and protective clothing (for specifications refer to section 8.2. SDS) Possibly absorb it with inert materia or sucked it. After wiping up, wash with water the area and materials involved
Diluited product	Wear gloves and protective clothing (for specifications refer to section 8.2. SDS). Wash with water the area and materials involved
Storage of the product	Keep in original container closed tightly. Do not store in open or unlabelled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool and dry place, away from heat sources and direct exposure to sunlight.
In case of accidents, emergency or fire	Immediately inform the customer. Follow company emergency instruction.