

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

1.1. Product identifier

Product name : PERCISAN
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]

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 dedicated facilities[PROC8B]

Not recommended uses

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

AEB SpA - Via Vittorio Arici 104 S.Polo - 25134 Brescia (BS) Italy
Tel. +39.030.2307.1 Fax +39.030.2307281
E-mail: info@aeb-group.com - Internet: www.aeb-group.com
E-mail tecnico competente/technical dept.: sds@aeb-group.com

AEB USA
111 N Cluff Avenue
Lodi CA 95240 (USA)
Tel: +1 2096258139 Fax: +1 2092248953
Email: info@aebusa.com - Internet: www.aeb-group.com

AEB AFRICA (PTY) LTD
18 Track Crescent, Cor. Station Road
Montague Gardens 7441
Cape Town (South Africa)
Tel.: +27 215512700 - Fax: +27 (0) 215511919
Email: info@aeb.co.za - Internet: www.aeb-group.com

AEB OCEANIA PTY LTD
178A Wakaden Street
Griffith NSW 2680
T: 1300 704 971
Email: aeboceania@aeb-group.com - Internet: www.aeb-group.com

1.4. Emergency telephone number

AEB SpA

Centralino/Switchboard: +39.030.2307.1 - (h 8.30-12.00 13.30-18.00 GMT +1; Lingua/Language: Italiano, English)

AEB USA

Switchboard: +1 2096258139 (GMT -8; Language: English)

AEB AFRICA (PTY) LTD

Switchboard: +27 215512700 (GMT +1; Language: English, Afrikaans)

AEB OCEANIA PTY LTD

Switchboard: +61 1300 704 971 (GMT +9; Language: English)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

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

Pictograms:

GHS03, GHS05, GHS07

Hazard Class and Category Code(s):

Ox. Liq. 3, Acute Tox. 4, Skin Corr. 1, Eye Dam. 1

Hazard statement Code(s):

H272 - May intensify fire; oxidiser.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

The product has oxidizing properties, it can intensify a fire.

Harmful product: do not ingest

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.

2.2. Label elements

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



Pictogram, Signal Word Code(s):

GHS03, GHS05, GHS07 - Danger

Hazard statement Code(s):

H272 - May intensify fire; oxidiser.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

Supplemental Hazard statement Code(s):

not applicable

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.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or a doctor.

Disposal

P501 - Dispose of contents/container to local/regional/national/international regulations

Contains:

hydrogen peroxide, citric acid.

Contains (Reg.EC 648/2004):

>= 15% < 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

This product, and the substances it contains, are not currently identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (UE) 2018/605 as of date of drafting of the MSDS.

Do not ingest. Keep out of reach of children.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
Hydrogen peroxide	>= 27,2 < 29,3%	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 Chronic 3, H412 Limits: Aquatic Chronic 3, H412 %C >=63; Skin Corr. 1A,	008-003-00-9	7722-84-1	231-765-0	01-2119485 845-22-XXX X

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		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 %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 = 431,0 mg/kg ATE inhal > 0,2mg/l/4 h				
Citric acid	>= 7,2 < 8,8%	Eye Irrit. 2, H319; STOT SE 3, H335		5949-29-1	201-069-1	01-2119457 026-42-XXX X

SECTION 4. First aid measures

4.1. Description of first aid measures

Intervene quickly. Get medical attention if necessary. Do not drink or induce vomiting if the patient is unconscious. Take care of your own safety, then remove the affected person from the danger area. Remove contaminated or soaked clothing immediately or soaked clothing and remove it safely. Keep the affected person warm, quiet and covered. Do not leave affected person unsupervised. In case of fainting: lie the person on their side in a stable position

In case of accidental contact

Take off contaminated clothing immediately, including shoes, in the shower: risk of ignition. In case of splashes, remove soaked clothing and immediately immerse in water. Symptoms of intoxication may appear even after several hours. It is recommended to remain under medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest, administer artificial respiration.

In case of contact with the eyes, take immediate action. Wash thoroughly with running water, keeping the eyelid away from the eye. Immediately send the injured person to an ophthalmologist. Do not treat the eye with ointments or oils. Do not use eye drops or ointments of any kind before examination or advice from an ophthalmologist. Continue to rinse. Call a doctor immediately. Contact an POISON CENTRE or doctor. In case of skin contact, immediately remove contaminated clothing, wash affected parts of the body with soap and water. If redness or irritation persists, send the injured person to an emergency room for treatment (burns). Call a doctor immediately.

If swallowed, do not induce vomiting. Rinse the mouth with water and immediately send the victim to the first aid. If the victim is fully conscious/vigilant, rinse the mouth. Seek immediate medical physician immediately. Do not perform gastric lavage, danger of foaming reflux. Ingestion of this corrosive material may cause severe ulceration, inflammation and possible perforation of the digestive canal, with bleeding and loss of fluids. Inhaling it during induced vomiting can result in severe lung damage.

If inhaled, move the casualty away from the polluted area; if respiratory insufficiency occurs, administer artificial respiration artificial respiration with a self-expanding breathing mask (AMBU). Send to first aid immediately. Place under medical supervision. In case of complaints, return to hospital. Contact an ANTIVELENI CENTRE or doctor.

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

Appearances of irritation to the skin and mucous membranes. Causes burns. drowsiness, Headache, dizziness, drowsiness, nausea. Health damage can be delayed.

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

Adverse Health Effects

Skin Contact: Causes severe skin burns and eye damage. Effects of skin contact may include discoloration Erythema

Eye Contact: Causes severe skin burns and eye damage

Effects on the environment

Easily biodegradable. Not bioaccumulative.

Physical and chemical hazards

Risk of decomposition on contact with incompatible materials Decomposition products: see chapter 10

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

Notes to physician: Treat symptomatically.

If large quantities are ingested or inhaled, contact a poison control centre immediately.

This material is seriously corrosive to the eyes and can cause delayed keratitis.

Ingestion of this corrosive material can cause severe ulceration, inflammation and possible perforation of the alimentary tract.

Inhalation during induced vomiting can cause severe lung damage.

Persons with pre-existing skin, eye or respiratory tract diseases may be at increased risk due to the irritant and corrosive properties of this material. At first, only the local effect occurs, characterised by a progressive tissue injury that penetrates quickly in depth.

Depending on the intensity of exposure, it causes irritation of varying severity in the eye, tearing and detachment of the epithelium conjunctival and horny epithelium, opacity of the cornea, oedema and ulceration. Danger of blindness.

Irritations and

superficial lesions up to ulceration and scarring.

After absorption into the body due to an accident, the symptoms and clinical picture depend on the kinetics of the substance (amount of the substance absorbed, the time of reabsorption and the effectiveness of the measures taken for timely elimination (first aid) / elimination-metabolism).

A specific action of the product is not known.

For more detailed information on health effects and symptoms, see Section 11.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: water spray, dry chemical products. Intervene with water, better if fractionated, from a safe distance and upwind. Cool containers exposed to fire and surrounding area. Do not remediate, clean or recover until the entire area has been completely cooled. In case of decomposition, evidenced by the formation of fumes and by overheating of the containers, it is essential to cool with water.

Unsuitable Extinguishing Media: Organic compounds, Direct water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire, it may favor the ignition of combustible materials. Thermal decomposition in oxygen, capable of activating combustion sources danger of overpressure in cylinders exposed to heat: risk of explosion

5.3. Advice for firefighters

Evacuate personnel to safe areas. Keep unprotected and unauthorised persons away.
As in any fire, wear suitable respiratory equipment and protective clothing, including gloves and protection for eye/face protection.
Fight fire from a distance (over 15 m). Cool containers/tanks with water spray. Remove containers exposed to fire.
Prohibit all sources of sparks and ignition - Do not smoke.
Prevent extinguishing agents from entering drains or watercourses.

Special protective equipment (see also section 8). Use full-face mask and/or self-contained breathing apparatus (EN 317), fireproof gloves (EN 469), fireproof clothing (EN 659, fireman's boots (HO A29-A30).

Protective actions to be taken

Move containers away from the fire area, if possible without risk, or cool the containers because if the material is exposed to thermal radiation or is directly involved, it may emit toxic fumes. Damaged containers should only be handled by experienced, trained and authorised personnel. Extinguish the fire at a safe distance from the containers, using hoses or automatic fire extinguishing systems with nozzles positioned above the containers. Proceed with the collection of extinguishing water. Cool containers exposed to fire with water spray. Avoid direct contact of product with water. Do not allow extinguishing water to contaminate surface or ground water. surface or ground water

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Move away from the affected area. Ensure adequate ventilation. Do not breathe dust or vapours. Wear protective clothing, gloves and eye/face protection.

6.1.2 For emergency responders:

Eliminate all open flames and possible sources of ignition. Use respiratory protection. Wear suitable protective clothing (section 8) Provide adequate ventilation. Avoid contact with skin and eyes. Evacuate the danger area and, if necessary, consult an expert. If safety conditions permit, seal the leak. Discard all incompatible materials.

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.

Discharge into sewers or the natural environment only after thorough dilution with water

Dispose of residue in accordance with regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Wipe dry with inert absorbent material. Under no circumstances reintroduce the product into another container (risk of decomposition)

6.3.2 Cleaning up:

After collection, wash the affected area and materials with water.

6.3.3 Other information:

Disposal: dispose of the wash water as waste water, the absorbed material through an authorised disposer according to local/national regulations in force

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

The information in this section contains general guidance and advice.
Refer to the list of uses identified in section 1 and the attached exposure scenarios.
Handle in accordance with good industrial hygiene and safety practices.

Storage and handling provisions applicable to corrosive, harmful, oxidising liquid products.
Provide adequate ventilation and exhaust in the vicinity of equipment.
Provide showers, eyewater fountains

Advices for safe use

Do not allow overpressure to build up.
Handle avoiding splashes and vapour emission.
Prohibit all sources of sources of sparks and ignition - Do not smoke.

Hygiene measures

Prohibit contact with skin, eyes and inhalation of vapours. In the event of splashes, remove soaked clothes and immediately immerse in water.
Do not eat, drink or smoke during use. Wash hands after handling.
Remove contaminated clothing and protective clothing before entering food service areas

7.2. Conditions for safe storage, including any incompatibilities

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.
Keep away from combustible materials.
Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.

Incompatible products: combustible materials, reducing agents, metals, metal oxides, bases, acetone.

Packaging-storage material: stainless steel, aluminium (pickled and passivated), polyethylene, recommended polytetrafluoroethylene (PTFE) joints

7.3. Specific end use(s)

Industrial Manufacturing:

Handle with extreme caution. Store in a well-ventilated place away from heat sources, in the original containers, tightly closed

Manufacture of food products:

Handle with extreme caution. Store in a well-ventilated place away from heat sources, in the original containers, tightly closed

See the annex exposure scenario.

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

Finland: 1/1,4

France: 1/1,5

Germany (DFG)(AGS): 0,5/0,71

Ireland: 1/1,5

Norway: 1/1,4

People's Republic of China: x/1,5

Poland: x/0,4

Singapore: 1/1,4

South Korea: 1/x

Spain: 1/1,4

Sweden: 1/1,4

Switzerland: 1/1,4 MAK

USA – NIOSH: 1/1,4

USA – OSHA: 1/1,4

United Kingdom: 1/1,4

Limit value – Short term

(ppm)/(mg/m³)

Australia: x/x

Austria: 2/2,8

Belgium: x/x

Canada – Ontario: x/x

Canada – Québec: x/x

Denmark: 2/2,8

Finland: 3(1)/4,2(1)

France: x/x

Germany (DFG): 0,5/0,71

Ireland: 2(1)/3(1)

People's Republic of China: x/x

Poland: X/0,8(1)

Singapore: x/x

South Korea: x/x

Spain: x/x

Sweden: 2(1)/3(1)

Switzerland: 2(1)/2,8(1) BAC

USA – NIOSH: x/x

USA – OSHA: x/x

United Kingdom: 2/2,8

Czech Republic PEL 1 mg/m³ - NPK-P 2 mg/m³ - Poznámky I- Přepočít 0,707 ppm

Portugal : n.d

Slovakia: NPEL priemerný 1 ppm - NPEL priemerný 1,4 mg/m³ - NPEL krátkodobý 2 ppm - NPEL krátkodobý 2,8 mg/m³ - Poznámka /

Remarks

Finland-Poland-Sweden-Switzerland (1) 15 minutes average value

Germany (DFG)	(1) 15 minutes average value
Ireland	(1) 15 minutes reference period

ACGIH 2019

Italy: Note A3 - TWA (ppm)/(mg/m³) 1/x- STEL/C (ppm)/(mg/m³) x/x - Effetti Critici: irrt (oclr, rspr at e cute)

- 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 = 0,0126 (mg/l)

sediment Sweet water = 0,47 (mg/kg/sediment)

Sea water = 0,0126 (mg/l)

sediment Sea water = 0,047 (mg/kg/sediment)

intermittent emissions = 0,0138 (mg/l)

STP = 4,66 (mg/l)

ground = 0,0023 (mg/kg ground)

- Substance: Citric acid

PNEC

Sweet water = 0,44 (mg/l)

sediment Sweet water = 3,46 (mg/kg/sediment)

Sea water = 0,044 (mg/l)

sediment Sea water = 34,6 (mg/kg/sediment)

STP = 1000 (mg/l)

ground = 33,1 (mg/kg ground)

8.2. Exposure controls

Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Manufacture of food products:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

8.2.2 Individual protection measures:

(a) Eye / face protection

Wear tight-fitting safety goggles (EN166) and/or face shield when pouring. The use of a full face mask or other full face face mask or other full face protection is strongly recommended when handling open containers or where there is a possibility of splashing

(b) Skin protection

(i) Hand protection

Waterproof and chemical-resistant protective gloves (EN 374) with specific training. Check the instructions regarding permeability and penetration time given by the glove supplier. Consider that due to various factors, such as temperature and conditions of use, the permeation time may vary from the indicated in the standard.

Protective gloves (PVC, neoprene).

Permeation time: 1- 4 hours

Minimum thickness for (PVC, neoprene) 0.7 mm

Gloves should be discarded and replaced if there is any sign of degradation or chemical penetration.

If you handle for a short time or if you handle small quantities of material

polychloroprene gloves(Nitrile, polychloroprene and latex, latex)

Permeation time < 30 min

Material thickness 0.11 mm

(ii) Other

Wear chemical-resistant clothing and boots, especially where direct dermal exposure and/or splashes may occur.

direct dermal exposure and/or splashes. Acid-resistant protective overalls. Suitable protective footwear

Suitable materials: PVC, neoprene, nitrile rubber (NBR), rubber.

Rubber or plastic boots

(c) Respiratory protection

Not required for normal use.

If plant controls do not maintain air concentrations below the recommended exposure limit values recommended exposure limit values (where applicable) or at an acceptable level (in countries where exposure limit values have not been established) a standard respirator must be used. In any case, avoid inhaling vapours, aerosols and gases and use a ventilated ventilated place.

If there is a risk of the workplace limit value being exceeded, wear respiratory equipment with filter combination A2B2E2K1P2 (Draeger) - OV/AG (3M) - ABEK2P3 (3M)

Observe the maximum times for wearing respiratory protection.

Use self-contained breathing apparatus or masks with type "A" filter during emergency procedures (Gas/Vapour Filters EN 141).

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Emissions from ventilation equipment or work processes should be checked to ensure that are in compliance with the directives of environmental protection legislation. In some cases, it will be necessary to carry out smoke abatement, add filters or make technical modifications to process equipment to reduce emission to acceptable levels. Preferably use pumping techniques to pour or discharge. Avoid penetration into the subsoil. Do not contaminate ground or surface water. In case of pollution of rivers, lakes or sewers, inform the relevant authorities in accordance with local laws. Do not allow product to enter drains.

General advice : Provide containment around storage tanks

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 it is considered not relevant for the characterization of the product	
Melting point/freezing point	-30°C (1.013 hPa)	
Boiling point or initial boiling point and boiling range	110-115°C (1.013 hPa)	
Flammability	not determined as it is considered not relevant for the characterization of the product	
Lower and upper explosion limit	not determined as it is considered not relevant for the characterization of the product	
Flash point	Cannot be determined due to the intense evolution of the gases/vapours extinguishing the flame. ASTM D92-05 / ASTM 1310 - Cleveland open cup (glass): Up to 100°C no ignition; above that vapours extinguish the flame	
Auto-ignition temperature	not determined as it is considered not relevant for the characterization of the product	
Decomposition temperature	>100°C	
pH	<2.0 (20°C) - 2.6 ± 0.5 (20°C, 1% sol.)	
Kinematic viscosity	not determined as it is considered not relevant for the characterization of the product	
Solubility	n-Heptane < 10 g/l p-Xylene < 10 g/l 1,2-Dichloroethane < 10 g/l Propan-2-ol > 500 g/l Acetone > 500 g/l Ethyl acetate 20-25 g/l	
Water solubility	1,000 g/l (20 °C) completely miscible	
Partition coefficient n-octanol/water (log value)	not determined as it is considered not relevant for the characterization of the product	
Vapour pressure	not determined as it is considered not relevant for the characterization of the product	
Density and/or relative density	1.15 ± 0.05 (20°C)	
Relative vapour density	not determined as it is considered not relevant for the characterization of the product	
Particle characteristics	not determined as it is considered not relevant for the characterization of the product	

9.2. Other information

9.2.1 Information with regard to physical hazard classes

No data available.

9.2.2 Other safety characteristics

SADT > 60°C – 50kg packaging - Isothermal Storage Test (UN test H.3).

SECTION 10. Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions. The product can react rapidly and violently if mixed with incompatible chemicals or heated. Do not mix directly with metal salts, accelerators, acids and alkalis especially if in concentrated form, reducing products and organic and flammable substances, combustible substances, strong acids. Reacts violently with basic products with release of heat. Keep away from chlorine or sulphite based products.

10.2. Chemical stability

Under storage conditions at normal room temperatures, the product is stable. No dangerous reactions known if handled and stored in accordance with regulations. Contamination can cause a dangerous increase in pressure - closed containers can explode. However, the product may release oxygen. Do not remove the degassing systems present on the original packaging. Contact with incompatible substances may cause decomposition at or below the self-accelerated decomposition temperature.

10.3. Possibility of hazardous reactions

The product is stable under normal conditions of storage and use, no hazardous reactions occur.

The product may decompose rapidly if mixed with incompatible chemicals or heated.

Do not mix directly with metallic salts, accelerants, acids and alkalis especially in concentrated form, reducing agents and organic and flammable substances. Contamination or contact with pollutants, catalysts of decomposition, metal salts, alkalis, reducing agents may cause, if they come into contact with the product, a decomposition self-accelerated, exothermic decomposition with oxygen development. The release of oxygen may promote fires.

During decomposition, there is an increase in temperature and the emission of fumes. The oxygen that develops during decomposition can, in the event of fire, promote the combustion of flammable substances or the ignition of combustible materials.

If attacked by fire, it will sustain combustion. In the event of fire or overheating, there will be an increase in the pressure of the container which may cause it to burst. Contact with flammable substances may cause fire or explosions.

Reacts with hypochlorite (development of chlorine).

10.4. Conditions to avoid

Avoid solar radiation, heat, heat action. Keep the container in a well-ventilated place. Keep in a cool place. To avoid thermal decomposition, do not overheat. Store at temperatures not exceeding 30°C. . Avoid contact with incompatible substances indicated in sec. 10.5

10.5. Incompatible materials

Reacts with alkalis and metals, metal oxides, organic materials, aluminium, mild steel. Keep away from products containing chlorine or sulphite-based bleaches, combustible material, reducing agents, acetone, powders, (risk of self-accelerating exothermic decomposition), decomposition catalysts, flammable material.

10.6. Hazardous decomposition products

Depending on the combustion properties, decomposition products may include oxygen (capable of activating combustion sources), vapours, acetic acid, heavy fumes. Incomplete combustion generates carbon monoxide, carbon dioxide and other toxic gases.

SECTION 11. Toxicological information

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

ATE(mix) oral = 1.253 mg/kg (calculated)

ATE(mix) dermal = > 2000 mg/kg

ATE(mix) inhal = >10 mg/l/4 h

(a) acute toxicity: Harmful product: do not ingest

Hydrogen peroxide: Ingestion - LD50 rat (mg/kg/24h bw): 693 - 1.026 mg/kg (H₂O₂ 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 (H₂O₂ 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

Citric acid: Ingestion - LD50 rat (mg/kg/24h bw): 5400 (study essentially equivalent to OECD guideline 401 - Roche 1981).

Skin contact - LC50 rat / rabbit (mg/kg/24h bw): >2000 (study substantially equivalent to guideline OECD 402 - Safepharm, 2006)

Inhalation - LD50 rat (mg/l/4h): nd

(b) skin corrosion/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%).

Citric acid: Based on available data, the classification criteria are not met.

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%).

Citric acid: Based on available data, the classification criteria are not met.

(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 (H₂O₂> 35%)

Citric acid: Based on available data, the classification criteria are not met.

Hydrogen peroxide: Corrosive to the eyes (H₂O₂> 35%)

Citric acid: Irritating

(d) respiratory sensitisation: Hydrogen peroxide: Does not cause sensitization on laboratory animals (guinea pig)

Citric 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)

Citric acid: In vitro: OECD Guideline 471 (Bacterial Reverse Mutation Assay): Negative.

In vitro mammalian chromosome aberration test: Negative.

(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).

Citric acid: Not available

(g) eproductivetoxicity: Hydrogen peroxide: Based on the available data, it cannot be assumed that the substance has a reprotoxic potential

Citric acid: Based on the available data, it cannot be assumed that the substance has a reprotoxic potential.

(h) specific target organ toxicity (STOT) single exposure: 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%.

Citric acid: Not available

(i) specific target organ toxicity (STOT) repeated exposure: Hydrogen 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)

Citric acid: Not available

(j) aspiration hazard: Hydrogen peroxide: Not available

Citric acid: Not applicable

11.2. Information on other hazards

No data available.

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)

Citric acid:

Acute toxicity EC50 Microorganism (Pseudomonas putida):> 1000 mg/l - 16 h

Acute toxicity LC50 Algae (Scenedesmus quadricauda): 425 mg/l - 168 h (100%)

Acute toxicity EC50 crustacean Daphnia magna (crustacean): 120 mg/l - 72 h (100%)

Acute toxicity EC50 crustacean Daphnia magna (crustacean): 1535 mg/l - 24 h (100%)

Acute toxicity LC50 fish (Leuciscus idus): 440 – 760 mg/l - 96 h (100%)

Chronic toxicity - fish NOEC (mg/l): n.a.

Chronic toxicity - crustaceans NOEC (mg/l): n.a.

Chronic toxicity algae NOEC (mg/l): n.a.

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)

Citric acid:
Readily biodegradable (97% 28 days OECD TG 301E)

12.3. Bioaccumulative potential

=====

Related to contained substances:

Hydrogen peroxide:

Not bioaccumulative. Rapid n-otanol/water degradation Log Kow: -1.57

Citric acid:

Not bioaccumulative - Log Pow: -1.72

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 %.

Citric acid:

Potentially mobile in soil, soluble in water

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

No data available.

12.7. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648

The (l) 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

Disposal methods:

Due to the high risk of contamination, recycling/recovery is not recommended. The generation of waste should be avoided or minimised wherever possible. Disposal of waste in accordance with regulations (preferably controlled incineration). Concentrated content or contaminated packaging must be disposed of by an authorised company or in accordance with local authorisation.

Clean packaging material is suitable for energy recovery or recycling in accordance with local legislation.

A waste code number (European waste index) cannot be decided for this product, as only the type of use by the user allows an assignment.

Contaminated containers: Care must be taken when handling emptied containers that have not been cleaned or rinsed. For handling and measures in case of accidental spillage of the waste, in general the generally apply as given in sections 6 and 7.

SECTION 14. Transport information

14.1. UN number or ID number

ADR/RID/IMDG/ICAO-IATA: 2014



If subject to the following characteristics is ADR exempt:

Combination packagings: per inner packaging 1 L per package 30 Kg

Inner packaging placed in shrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 Kg

14.2. UN proper shipping name

ADR/RID/IMDG: PEROSSIDO DI IDROGENO IN SOLUZIONE ACQUOSA contenente almeno il 20% ma al massimo il 60% di perossido di idrogeno (stabilizzata se necessario)

ADR/RID/IMDG: HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)

ICAO-IATA: HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 5.1

ADR/RID/IMDG/ICAO-IATA: Label : 5.1 + 8

ADR: Tunnel restriction code : E

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 L

IMDG - EmS : F-H, S-Q

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: II

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is not environmentally hazardous

IMDG: Marine polluting agent : No

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 contained substances (All. XVII Reg. EC 1907/2006): not applicable
Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC in a proportion $\geq 0.1\%$.
Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC in a proportion $\geq 0.1\%$.

The product does not contain:

- substances subject to Regulation (EC) No 649/2012 REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of dangerous chemicals.
- substances subject to Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.
- substances subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants

Reg. EC 648/04: see 2.2

Seveso category: P8

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

15.2. Chemical safety assessment

For the following substances, a Chemical Safety Assessment (CSA) and Chemical Safety Report (CSR) were carried out according to the Chemical Safety Assessment (CSR) as required by REACH Regulation No. 1907/2006: citric acid monohydrate and hydrogen peroxide

SECTION 16. Other information

16.1. Other information

Points modified from previous revision: sec. 2.3, 3, 4,5,6,7,8,9,10,11,12,16

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.
- H412 = Harmful to aquatic life with long lasting effects.
- H319 = Causes serious eye irritation.

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

[CLP]:

- H272 - May intensify fire; oxidiser. Classification procedure: On basis of test data
- H302 - Harmful if swallowed. Classification procedure: Calculation method
- H314 - Causes severe skin burns and eye damage. Classification procedure: On basis of test data
- H318 - Causes serious eye damage. Classification procedure: On basis of test data

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.
- Regulation (EC) n. 648 of 31/03/04 (on detergents) 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 européen relative au transport International des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimati

BFC: BioconCentration Factor

BOD: Biochemical Oxygen 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 concernant le transport International ferroviaire des marchandises 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://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>
- SDS supplier
- GESTIS DNEL Database: <http://www.dguv.de/ifa/gestis/gestis-dnel-datenbank/index-2.jsp>
- 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 to the previous edition: issued in according with Reg. (UE) 878/20

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

<p>Don't eat or drink. Don't smoke. Don't use in proximity of open flame.</p>	
<p>Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.</p>	
<p>Spillage instructions</p>	<p>Dilute with fresh water and mop up.</p>
<p>Hygiene practices</p>	<p>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.</p>

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.

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

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

<p>Don't eat or drink. Don't smoke. Don't use in proximity of open flame.</p>	
<p>Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.</p>	
<p>Spillage instructions</p>	<p>Dilute with fresh water and mop up.</p>
<p>Hygiene practices</p>	<p>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.</p>

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.

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

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

<p>Don't eat or drink.</p> <p>Don't smoke.</p> <p>Don't use in proximity of open flame.</p>	
<p>Wash hands after use.</p> <p>Avoid contact with damaged skin.</p> <p>Do not mix with other products.</p>	
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.

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

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

<p>Don't eat or drink. Don't smoke. Don't use in proximity of open flame.</p>	
<p>Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.</p>	
<p>Spillage instructions</p>	<p>Dilute with fresh water and mop up.</p>
<p>Hygiene practices</p>	<p>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.</p>

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.

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

WORKING ISTRUCTION TABLE



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#11 02/06/23

Use description	[PROC4] Use in batch and other process (syn- thesis) where opportunity for exposure arise [PROC7] Industrial spraying [PROC8b]Transfer of substance or preparation (charging/discharging) from/to ves- sels/ large containers at dedicated facilities. [PROC13]Treatment of articles by dipping and pouring
Product name	PERCISAN
Classification of the product (100%)	H272 - May intensify fire; oxidiser. H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage. H318 - Causes serious eye damage.
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (1%) the product is classified: no health hazards
Handling of the product (100%)	Avoid contact and inhalation of dust 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 (EN 166).
Diluted product	-
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) After wiping up, wash with water the area and materials involved
Diluted product	Wear gloves, mask and protective clothing. 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.