

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], Treatment of articles by dipping and pouring[PROC13]

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

Produced by
AEB SpA
Via Vittorio Arici 104 S. Polo
25134 Brescia

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

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

The use of this chemical agent involves the obligation of "risk assessment" by the employer in accordance with the provisions of Dlgs n. 81. April 9, 2008. Workers exposed to this chemical agent should not be subject to health surveillance if the results of the risk assessment show that, depending on the type and quantity of dangerous chemical agent and method and frequency of exposure to the agent, there is only a "moderate Risk" for the health and safety of workers and that the measures laid down in the Decree are sufficient to reduce the risk.

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;	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
		Aquatic Chronic 3, H412				
Citric acid	>= 7,2 < 8,8%	Eye Irrit. 2, H319		5949-29-1	201-069-1	01-2119457 026-42-XXX X

SECTION 4. First aid measures

4.1. Description of first aid measures

General advice: In the shower, immediately take off all contaminated clothing, including shoes. Ignition risk. In case of splashes, remove the soaked clothes and immerse them in the water immediately. Symptoms of intoxication can appear even after several hours. It is recommended to remain under observation for at least 48 hours after the accident. In case of irregular breathing or respiratory arrest, practice artificial respiration.

Inhalation: remove the injured person from the polluted area; if he has respiratory insufficiency, practice breathing artificial with self-expanding balloon mask (AMBU). Immediately send to the emergency room. Put under medical supervision. In case of disturbances: Hospitalize to the hospital. Contact a POISON CENTER or doctor.

Contact with eyes: intervene immediately. Wash thoroughly with running water, holding well move 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 the visit or the advice of the ophthalmologist. Contact a CENTER POISONERS or a doctor. Continue rinsing.

Skin contact: remove contaminated clothing immediately, wash all parts of the body abundantly affected with soap and water. If redness or irritation persists, send the injured person to the emergency room for the treatment (burn). Wash the skin with plenty of warm water, running the water gently. Remove contaminated clothing immediately and wash it before wearing it again. In case of irritation or rash of the skin: consult a doctor.

Ingestion: do not induce vomiting. Rinse the mouth with water and immediately send the injured person to the emergency room. Do not perform gastric lavage, danger of foam reflux. Ingestion of this corrosive material it can cause severe ulceration, inflammation and possibly perforation of the digestive canal, with bleeding and loss of fluids. Its inhalation during induced vomiting can result in severe lung damage. DO NOT induce vomiting. Keep at rest. Immediately call a POISON CENTER or doctor.

First Aid - Advice: if swallowed, do not induce vomiting. Have your mouth rinse with water and request intervention of a doctor. Do not try to induce vomiting, rinse your mouth and lips thoroughly with water if the person is conscious, then admit to the hospital.

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

Inhalation: at high concentrations of vapors / mists / aerosols: irritating to the respiratory tract. Skin Contact: Causes severe skin burns and eye damage. Causes skin irritation. Effects of skin contact may include: Discoloration Erythema Eye Contact: Causes serious eye damage. Risk of serious eye damage. Ingestion: harmful if swallowed. Risk of burns to mouth, esophagus and stomach. Signs / Symptoms of overexposure Inhalation: irritation of the respiratory tract, cough. Ingestion: stomach pains. Skin contact: severely corrosive to the skin. Causes severe burns. Contact with eyes: severely corrosive to the eyes. Causes severe burns.

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

No information available on clinical testing and medical monitoring. Specific toxicological information, if available, can be found in section 11.

Notes to physician: Treat symptomatically. If large quantities are ingested or inhaled, contact a poison control center

immediately. This product is corrosive to the eyes and can cause delayed keratitis. If ingested, do not induce vomiting. Rinse the mouth with water and immediately send the injured person to the emergency room. Contact a Poison Control Center for more information on treatment. People with pre-existing skin, eye or respiratory diseases may be at increased risk due to the irritating and corrosive properties of this material. Treat any further effects symptomatically. Contact a poison control center for more information on treatment. For more detailed information on health effects and symptoms, see Section 11. Specific toxicological information, if available, can be found in Section 11.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: water spray, alcohol resistant foam, dry chemicals. Intervene with water, preferably divided, from a safe distance and upwind. Cool fire-exposed containers and surrounding area. Do not carry out any reclamation, cleaning or recovery operations until the entire area has been completely cooled. In case of decomposition, highlighted by the formation of fumes and the overheating of the containers, it is essential to cool with water.

Unsuitable extinguishing media Unsuitable extinguishing media: direct water jet.

5.2. Special hazards arising from the substance or mixture

May cause ignition of combustible materials. Thermal decomposition into oxygen, capable of activating combustion foci.

Risk of fire due to heating. Avoid breathing fumes / vapors. The heat of the fire can decompose the products present in the area. If not properly cooled, the fire can easily resume. The oxygen that develops during decomposition can promote combustion in the event of a fire. In a fire or if heated, a pressure increase of the container will occur which may cause it to burst. The main products of combustion are carbon dioxide, carbon monoxide, water. Exposure to combustion or decomposition products can cause damage to health. People with pre-existing skin, eye or respiratory diseases may be at increased risk due to the irritating and corrosive properties of this material. Treat any further effects symptomatically. Contact a poison control center for more information on treatment. Stay on the side from which the wind blows (upwind) and operate at a safe distance. Provide a rapid container evacuation system. ogics, if available, can be found in section 11.

5.3. Advice for firefighters

Operate in accordance with the provisions of the site fire prevention plan. Evacuate and isolate the area until the fire is completely extinguished, limiting access only to trained personnel or firefighters. As in any fire, wear self-contained breathing apparatus and appropriate protective clothing including gloves and eye / face protection. Firefighters must always wear complete fire protection equipment: full face mask with type A filter for gases / vapors [ref. EN 143] or self-contained breathing apparatus with air reserve [ref. EN 317]; fireproof clothing [ref. EN 469]; fireproof gloves [ref. EN 659]; fire brigade boots [ref. HO A29-A30].

If possible, operate upwind and at a safe distance, using hoses or automatic fire extinguishing systems with nozzles positioned above the containers.

Remove the containers from the fire area, if this can be done without risk. Alternatively, cool the containers in order to avoid overheating (an excessive increase in pressure can cause them to burst) and the development of irritating / toxic fumes / gases / vapors. Provide adequate ventilation. Avoid breathing gases / vapors and contact with eyes and skin. Prevent contaminated fire extinguishing water from flowing into drains or water courses.

Other Recommendations

In the event of a small fire, extinguish with powder or carbon dioxide and then wet with water to prevent re-ignition. Cool closed containers with water. Cool the peroxide containers exposed to fire with water and upwind. In the event of a small

fire, extinguish with powder or carbon dioxide and then wet with water to prevent re-ignition.

Danger of fire and explosion

Decomposition under the effect of heat. In case of fire and / or explosion do not breathe fumes. The oxygen that develops during decomposition can promote combustion in the event of a fire. In a fire or if heated, a pressure increase of the container will occur which may cause it to burst. The main products of combustion are: Carbon Dioxide, Carbon Monoxide, Water. In case of fire and decomposition, Irritating gases and vapors may be produced. The main products of combustion / decomposition are: Oxygen, Carbon Dioxide, Carbon Monoxide, Water. ATTENTION: it can be switched on again. Decomposition under the effect of heat. If attacked by fire, it will support combustion. In case of fire and / or explosion do not breathe fumes.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Provide adequate ventilation. Do not breathe vapors / mists / aerosols / fumes. Avoid contact with skin and eyes. Move away from the affected area and alert the internal emergency workers or the fire brigade. If immediate action is required, refer to the indications / instructions for emergency personnel.

6.1.2 For emergency responders:

Wear suitable protective clothing, gloves and eye / face protection. Wear a recommended respirator (see section 8) Avoid contact with skin and eyes. Do not breathe gas / fumes / vapors / mists / aerosols.

Move away from the affected area people not involved in emergency intervention. Evacuate and restrict access. If spreading occurs on the ground, report the danger and prevent local authorities. Ensure good ventilation of the area. Remove all sources of ignition. Eliminate all sources of sparks and ignition - Do not smoke. If safety conditions permit, seal the leak. Eliminate all incompatible materials. Stop the source of ignition if the operation does not involve risks. Whenever possible, operate above wind. Avoid coming into contact with the substance or handling the containers without adequate protection. Use water spray to reduce vapor formation or divert cloud motion. Isolate the area until the substance is completely dispersed. Intervene with water, preferably divided, from a safe distance and upwind.

6.2. Environmental precautions

Avoid direct flow into the sewer, surface and ground water. Avoid runoff on the ground and penetration into the subsoil. Dilute abundantly with water.

Dam the losses of large quantities with inert absorbent and / or earth, dispose of the residue in compliance with the regulations in force.

Inform the responsible authorities if the pure product reaches the sewers, surface or ground water or the ground.

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Conclude and collect any spills with non-combustible absorbent material, such as sand, earth, diatomite and dispose of the product in a container in compliance with current legislation (see section 13). Collect the leaked product and the non-combustible absorbent (perlite, vermiculite, or sand) in open and clean polyethylene containers and / or in polyethylene buckets. Do not use rags, sawdust, paper or any other flammable material (danger of spontaneous combustion). Thoroughly moisten the contents. Residues must not be collected in closed containers. Never reintroduce spilled product into original containers. Reuse is absolutely not recommended.

6.3.2 Cleaning up:

After collection, wash the area and materials involved with water. dispose of the wash water as waste water. Follow the recommendations of paragraph 13

6.3.3 Other information:

None in particular.

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

Apply the legislation on Safety and Hygiene in the Workplace. Use the personal protective equipment described in paragraph 8.

Storage and handling provisions applicable to products: Liquids. Harmful. Irritants Corrosives.

Provide adequate ventilation and extraction near the equipment. Provide showers, eye fountains. Provide near water supply points. Establish the prohibition of using open flames, causing sparks and smoking in places where the product is handled and stored. Do not eat, drink or smoke in the workplace. Avoid: direct contact with skin and eyes; inhalation of vapors and fumes. Handle in well ventilated areas. Avoid any kind of loss and / or escape. Do not leave the containers open. Not

mix / pollute with other substances that may cause their decomposition. Carefully take care of the cleaning of the containers used for sampling and pouring. Never reintroduce the product taken into the original container. Handle containers with care. Do not reuse empty containers before they have been cleaned. Before carrying out transfer operations, make sure that there are no residues of incompatible substances inside the tank. In case of insufficient ventilation, wear suitable respiratory equipment

7.2. Conditions for safe storage, including any incompatibilities

Prohibit access to unauthorized persons. Store in accordance with local and national legislation. Keep only in the original container, away from flammable materials and incompatible substances, from heat sources (vapor lines, flames, sparks, direct sunlight). Store in a closed container. Keep away from food or feed and drinks.

For conditions to avoid see subsection 10.4.

For incompatible materials see subsection 10.5.

7.3. Specific end use(s)

Industrial Manufacturing:

Handle with care. Store in a well ventilated place and away from heat sources (7-30 ° C)

Manufacture of food products:

Handle with care. Store in a well ventilated place and away from heat sources (7-30 ° C)

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): 0,5/0,71
Ireland: 1/1,5
People's Republic of China: x/1,5
Poland: x/0,4
Singapore: 1/1,4
South Korea: 1/1,5
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

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)

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- Přepočet 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)

Acido citrico

n.d.

- Substance: Hydrogen peroxide

DNEL

Local effects Long term Workers inhalation = 1,4
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 = 0,047 (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)
ground = 33,1 (mg/kg ground)

8.2. Exposure controls

8.2.1 Appropriate technical checks:

Use personal protective equipment compliant with the standards required by the European and national reference standards. In any case, consult RSPP before making a final decision on the devices to equip. The following information covers uses in subsection 1.2.

Safety measures recommended for the handling of pure product (activities such as filling and transferring the product to the equipment used, bottles or containers): good local ventilation and a good air exchange system must be ensured. If these measures are not sufficient to keep the vapor concentrations below the exposure limit, it is necessary to use adequate means of respiratory protection.

Emergency eye wash fountains and safety showers should be available in close proximity to any potential contact. Safety measures recommended for handling diluted product (activities such as use in closed processes, industrial spray, immersion: good local ventilation and a good air exchange system must be ensured.

Food industries:

No specific controls foreseen (act in accordance with good practice and specific legislation required for the type of associated risk)

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

Not needed for normal use.

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

(b) Skin protection

(i) Hand protection

Not necessary for normal use.

During pouring or for prolonged contact, use waterproof and chemical resistant protective gloves (EN 374). Check the instructions regarding permeability and breakthrough 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 what is indicated in the standard.

Use gloves made of butyl rubber (0.5 mm > 8h), vinyl, nitrile, neoprene or other similar devices on indication of the employer

Recommended gloves for pouring: nitrile rubber, breakthrough time: > = 30 min, material thickness: > = 0.4 mm

Recommended gloves for prolonged contact: butyl rubber breakthrough time: > = 480 min, material thickness: > = 0.7 mm.

Check its status before use.

(ii) Other

When handling the pure product, wear full protective clothing (generic workwear / antacid, safety shoes S3-EN ISO 20345) or other protective equipment, according to the instructions of the employer

(c) Respiratory protection

Not needed for normal use.

In case of insufficient ventilation, use a mask, wear an appropriate respirator (respirator with Filter A.): European Cartridges multipurpose type (A2B2E2K1P2), Combination Cartridge / Filter: 60922, 60923 or 60926, 3M multipurpose type (ABEK2P3), Acid Gas (AG) 6002, Organic Vapor / Acid gas (OV / AG) 6003, Multigas (MG / V) 6006. Recommended filter ABEK or other protection devices, according to the indications of the employer

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the directives of environmental protection legislation. In some cases, it will be necessary to perform fume abatement, add filters or make technical changes to the process equipment to reduce the emission to acceptable levels. Preferably use pumping techniques for pouring or draining. Avoid penetration into the subsoil. Do not contaminate the groundwater and surface waters. In case of pollution of rivers, lakes or sewers, inform the competent authorities in accordance with local laws. Do not let product enter drains.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Liquid, clear, colorless	
Odour	Characteristic	
Odour threshold	not determined as considered not relevant for the characterization of the product	
pH	<2.0 (20 ° C); 2.92 - 2.97 (20 ° C, sol. 1%)	
Melting point/freezing point	-30 ° C (1.013 hPa)	
Initial boiling point and boiling range	110-115 ° C (1.013 hPa)	
Flash point	Not inflammable	

Physical and chemical properties	Value	Determination method
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	20 hPa (20 ° C) (Hp 30% w / w)	
Vapour density	> 1	
Relative density	1.15 ± 0.05 (20 ° C)	
Solubility	not determined as considered not relevant for the characterization of the product	
Water solubility	100% 20 ° C	
Partition coefficient: n-octanol/water	1.5 (20 ° C)	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product	
Decomposition temperature	115 ° C	
Viscosity	1.17 cP (20 ° C)	
Explosive properties	Not explosive	
Oxidising properties	Oxidant	

9.2. Other information

SADT > 85 ° C

Henry's constant 7.5 104 Pa m³ / mol (20 ° C)

Active oxygen content: 12.8-13.8%

SECTION 10. Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions. Presence of a stabilizer. No danger of reactivity known under normal conditions of storage and use; the product can react rapidly and violently when 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. Keep away from chlorine or sulphite products.

10.2. Chemical stability

Stable under recommended storage conditions. Under the recommended storage conditions the product is stable for at least six months from the date of manufacture. No decomposition is evident if the product is used and stored according to the suggested specifications. Contact with incompatible substances can cause decomposition at or below 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 can decompose rapidly 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. Decomposition under the effect of heat. In case of decomposition there is an increase in temperature and emission of fumes. The oxygen that develops during decomposition, in the event of a fire, can favor the combustion of flammable substances and an increase in the pressure of the container until it bursts.

10.4. Conditions to avoid

Store in a cool place, at temperatures no higher than 30 ° C, away from heat sources and direct sunlight to avoid thermal decomposition; do not overheat. Do not mix with incompatible chemical products, keep away from metal salts, metals, accelerators, acids and alkalis, especially if in concentrated form, reducing products and organic and flammable substances. Use only compatible materials listed on p. 7. Do not let overpressures develop. Do not leave the product confined between two valves. Regularly inspect the storages, noting any anomalies (corrosion, swelling, temperature rise). To prevent the ingress of impurities, provide breather tanks fitted with filters.

10.5. Incompatible materials

Reacts with alkalis and metals. Keep away from products containing chlorine or sulphite based bleaches. Contact, especially if prolonged, with metals, metal ions, alkalis, reducing agents and organic substances can initiate the self-accelerated decomposition process. It can give rise to violent reactions when in contact with strong oxidizing agents, strong reducing agents, acids, bases, amines, transition metal salts, sulfur compounds, rust, ash, dust (risk of self-accelerating exothermic decomposition).

10.6. Hazardous decomposition products

Thermal decomposition into oxygen, capable of activating combustion foci Hazardous decomposition products: oxygen, corrosive gases / vapors, acetic acid, carbon dioxide, carbon monoxide.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 1.531,8 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = 39,3 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 burns to the mouth, esophagus and stomach. By rapid release of oxygen: Risk of stomach dilation and haemorrhage with the possibility of serious injury, On the animal: (as aqueous solution). LD50 / Rat: 1,200 mg / kg (35%) - ATE value of 431 mg / kg. Skin contact - LC50 rabbit (mg / kg / 24h bw): irritating to the 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, edema. ATE value of 6500 mg / kg (70%) Inhalation - LC50, 4 h, rat, > 0.17 mg / l, vapor (H2O2 50%) animal, at high concentrations of vapors / mists (maximum concentration technically possible 50%); risk of pulmonary edema, at high concentrations of vapors / mists. Re effects are possible

Citric acid: Ingestion - LD50 rat (mg / kg / 24h bw): 5400

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw):> 2000

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: Not corrosive

Hydrogen peroxide: Corrosive to the skin (after semi-occlusive contact, rabbit, exposure time: 1 - 4 h) (50%) Corrosive to the skin (after semi-occlusive contact, rabbit, exposure time: 3 min) (50 - 70%).

Citric acid: Mildly 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 eyes (H₂O₂> 35%)

Citric acid: Not corrosive

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

Citric acid: Irritating

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

Citric acid: Not sensitizing

(e) germ cell mutagenicity: Hydrogen peroxide: In vitro tests revealed mutagenic effects. Genotoxic In vivo tests did not reveal mutagenic effects. In vivo mouse micronucleus test: Inactive (Method: OECD Test Guideline 474). Rat hepatocyte DNA repair test: Inactive (Method: OECD 486).

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

In vitro mammalian chromosome aberration test: Negative.

(f) carcinogenicity: Hydrogen peroxide: Oral, prolonged exposure, mouse, target organs: duodenum, carcinogenic effects. Dermal, prolonged exposure, mouse, animal testing did not reveal any carcinogenic effects.

Citric acid: Unavailable

(g) reproductive toxicity: Hydrogen peroxide: The substance is completely biotransformed (metabolised). Based on the available data, it cannot be assumed that the substance has a reproductive toxicity potential

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

(h) specific target organ toxicity (STOT) single exposure: Hydrogen peroxide: Inhalation, mice, 665 mg / m³, remarks: RD 50, irritating to the respiratory tract, H₂O₂ 50%. At high concentrations of vapors / mists: irritating to the respiratory tract.

Citric acid: Unavailable

(i) specific target organ toxicity (STOT) repeated exposure Hydrogen peroxide: Oral, 90 days, mouse, target organs: gastrointestinal tract, 300 ppm, LOAEL (pure substance) - Oral, 90 days, mouse, 100 ppm, NOAEL (pure substance) Inhalation, 28 days, rat, target organs: respiratory system, 10 ppm, LOAEL, vapor (pure substance) - Inhalation, 28 days, 2 ppm, NOAEL, vapor (pure substance). Inhalation: Upper respiratory tract irritation, nose irritant, local effects related to an irritant effect, LOAEL = 0.0029 mg / l (Method: OECD Test Guideline 407, rat, repeated)

Citric acid: Unavailable

(j) aspiration hazard: Hydrogen peroxide: Unavailable

Citric acid: Not applicable

=====

Related to contained substances:

Hydrogen peroxide:

Potential acute health effects

Inhalation: can emit gases, vapors which are very irritating to the respiratory system; at high concentrations of vapors / mists: risk of pulmonary edema, delayed effects are possible

Ingestion: risk of burns to the mouth, esophagus and stomach; due to rapid release of oxygen: risk of stomach dilation and haemorrhage with the possibility of serious injury, risk of death. Skin contact: causes severe burns. Corrosive to the skin.

Contact with eyes: Causes serious eye damage. Corrosive to the eyes.

Signs and symptoms of exposure

Inhalation: respiratory tract irritation, cough. Risk of pulmonary edema, Delayed effects are possible.

Ingestion: stomach pains.

Skin Contact: Effects of skin contact may include: discoloration, erythema, edema, pain or irritation, redness, possible blistering.

Eye contact: corrosive to eyes. It can cause irreversible damage to the eyes.

Delayed Effects:

Ingestion: stomach pains.

Skin Contact: Effects of skin contact may include: discoloration, erythema, edema, pain or irritation, redness, possible blistering.

Contact with eyes: Corrosive to eyes. It can cause irreversible damage to the eyes.

Citric acid:

Potential Acute Health Effects

Inhalation: May irritate respiratory tract.

Ingestion: May be harmful if swallowed.

Skin contact: Causes mild skin irritation.

Eye Contact: Causes eye irritation.

Signs and Symptoms of Exposure Inhalation

Exposure to atmospheric concentrations above the legal or recommended limits may cause irritation to the nose, throat or lungs.

Adverse symptoms may include the following: respiratory tract irritation coughing. Ingestion: irritating to mouth, throat and stomach. Skin contact: no known significant effects or critical hazards. Contact with eyes: causes serious eye irritation. Negative symptoms may include the following: pain or irritation, watery eyes, redness

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 Crustacea (Daphnia pulex 48h): 2, 4 mg / l, fresh water, semi-static test (HP100%)

NOEC Retest 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 Fish Toxicity)

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 crustaceans Daphnia magna (crustacean): 120 mg / l - 72 h (100%) Acute toxicity EC50 crustaceans Daphnia magna (crustacean): 1535 mg / l - 24 h (100%) Acute toxicity LC50 fish (Leuciscus idus): 440 - 760 mg / l - 96 h (100%)

Chronic toxicity - NOEC fish (mg / l): nd

Chronic toxicity - crustaceans NOEC (mg / l): nd

Chronic toxicity algae NOEC (mg / l): nd

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 photo-oxidation, 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, from 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:
Easily biodegradable (97% 28 days OECD TG 301E)

12.3. Bioaccumulative potential

=====

Related to contained substances:

Hydrogen peroxide:

Not bioaccumulative. Rapid n-ethanol / 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

No PBT/vPvB ingredient is present

12.6. 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

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION 14. Transport information

14.1. UN 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. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

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

Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC

Reg. EC 648/04: see 2.2

Reg. (EU) n. 1169/2011: see 2.2

Reg (UE) 528/2012: see to 2.2

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

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 1.2. Relevant identified uses of the substance or mixture and uses advised against, 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, 6.2. Environmental precautions, 6.3. Methods and material for containment and cleaning up, 6.4. Reference to other sections, 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, 8.2. Exposure controls, 9.2. Other information, 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 toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil

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 based on data of all mixture components

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.

Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)

Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Regulation (UE) 528/2012 (Biocides) et seq.

Procedure used to classify under CLP mixture (Reg. EC 1272/2008):

Physical hazards: On the basis of experimental data

H314 Skin. Corr. 1A: On the basis of experimental data

Other hazards: Calculation Method

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 Estimat

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: Environment 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 AEB 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: sec 1,4,5,6,7,8,9,10,11, exposure scenarios update - Working instruction table

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

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

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.

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

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.

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

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.

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#9 09/01/20

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	hemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).
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.