

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: aebocceania@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. Sol. 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

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, H314 %C >=70; Skin Corr. 1B, H314 50<=%C <70; Skin Irrit. 2, H315 35<=%C <50; Eye Dam. 1, H318	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
		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(mix) oral = 500,0 mg/kg ATE(mix) inhal = 1,5mg/l/4 h(dust-mist)				
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 immediately immerse them in the water. Symptoms of intoxication can 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, give artificial respiration.

Inhalation: remove the injured person from the polluted area; if he has respiratory insufficiency, apply artificial respiration with a self-expanding balloon mask (AMBU).

Immediately send to the emergency room. Put under medical supervision. In case of complaints: contact a POISON CENTER or a doctor.

Contact with eyes: act immediately. Wash with plenty of running water, keeping the eyelid well 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 POISON CENTER or doctor. Continue rinsing.

Contact with the skin: immediately remove contaminated clothing, wash the affected parts of the body with plenty of soap and water. If redness or irritation persists, send the injured person to the emergency room for treatment (burn). If skin irritation or rash occurs: seek medical attention.

Ingestion: do not induce vomiting, rinse the mouth with water and immediately send the injured person to the emergency room: his inhalation during induced vomiting can result in serious damage to the lungs. Do not perform gastric lavage, risk of foam reflux. Ingestion of this corrosive material can cause severe ulceration, inflammation and possibly perforation of the digestive tract, with bleeding and loss of fluids.

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: respiratory tract irritation, cough. Ingestion: stomach pains. Skin contact: severely corrosive to the skin. Causes severe burns. Eye contact: severely corrosive to the eyes. Causes severe burns.

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

If large quantities are ingested or inhaled, contact a poison control center immediately. This product is corrosive to eyes and skin: in case of contact, seek emergency room, showing this safety data sheet, if possible. Notes to physician: treat symptomatically. No information available on clinical testing and medical monitoring. 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 the containers exposed to the fire and the surrounding area. Do not carry out any reclamation, cleaning or recovery operations until the entire area has been completely cooled. In case of decomposition, evidenced by the formation of fumes and the overheating of the containers, it is essential to cool with water. Inadequate 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 outbreaks.

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, the pressure of the container will increase 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.

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, the pressure of the container will increase 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. Not smoking.

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 deflect 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 water and groundwater. Avoid runoff on the ground and the 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:

Contain 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 containers and cleaned of polyethylene and / or in polyethylene buckets. Do not use rags, sawdust, paper or any other flammable material

(danger of spontaneous combustion). Abundantly moisten the contents. Residues must not be collected in closed containers. Never reintroduce spilled product into original containers.

6.3.2 Cleaning up:

After collection, wash the affected area and materials 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

Storage and handling provisions applicable to products: liquid, noxious, irritating, corrosive.

Check with the employer for the need to provide adequate ventilation and extraction in the vicinity of equipment, showers or eye fountains.

Establish a ban on the use of open flames, causing sparks and smoking in places where the product is handled and stored.

Do not eat or drink in the workplace.

Avoid: direct contact with skin and eyes; inhalation of vapors and fumes. In case of insufficient ventilation, wear suitable respiratory equipment

Handle in well ventilated areas. Avoid any kind of loss and / or escape. Do not leave the containers open. Do 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.

7.2. Conditions for safe storage, including any incompatibilities

Forbid 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 (steam, flames, sparks, direct sunlight). Store in a closed container. Keep away from food or feed and drink.

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 away from heat sources (7-30 ° C) in the original, tightly closed containers

Manufacture of food products:

Handle with care. Store in a well-ventilated place away from heat sources (7-30 ° C), in the original, tightly closed containers

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)

- 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 = 0,047 (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

Appropriate engineering controls:

information relates to uses in subsection 1.2.

Safety measures recommended for handling 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 spraying, immersion): good local ventilation and a good air exchange system must be ensured.

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 necessary for normal use. Wear sealed safety goggles (EN166) and / or face shield. The use of a full face mask or other full face protection is strongly recommended in handling of open containers or in case 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 protective gloves and resistant to chemicals (EN 374). Check the instructions regarding permeability and breakthrough time, specified by the glove supplier. Please consider that due to several factors, such as temperature and conditions of use, the

breakthrough 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 as indicated by 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

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 protective 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 the 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	
Colour	Colorless	
Odour	characteristic of hydrogen peroxide	
Odour threshold	not determined as it is 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	
Evaporation rate	not determined as it is considered not relevant for the characterization of the product	

Physical and chemical properties	Value	Determination method
Flammability (solid, gas)	not determined as it is considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as it is 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 it is 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.

10.2. Chemical stability

Stable under recommended storage conditions. Under 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 can decompose rapidly 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. 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 burst.

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 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 entry of impurities, provide breather tanks fitted with filters or breather caps. Keep away from chlorine or sulphite products.

10.5. Incompatible materials

Reacts with alkalis and metals. 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 hazard classes as defined in Regulation (EC) No 1272/2008

ATE(mix) oral = >300<2000 mg/kg/bw

(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, for rapid release of oxygen, risk of stomach dilation and haemorrhage with the possibility of serious injury,

On animals (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 animals (aqueous solution): irritating to the 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: in high concentrations of mists, risk of pulmonary edema. Delayed 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): na

(b) skincorrosion/irritation: Corrosive product: causes severe skin burns and eye damage.

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: 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 sensitisation: 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: Vapors can be irritating to the respiratory system

Ingestion: risk of burns to the mouth, esophagus and stomach; for rapid release of oxygen, risk of stomach dilation and haemorrhage with the possibility of serious injury

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.

Ingestion: stomach pains, burns to the mouth

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

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

Delayed Effects:

Inhalation: respiratory tract irritation, cough.

Ingestion: stomach pains.

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

Eye contact: Corrosive to the 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. Adverse symptoms may include the following: pain or irritation, watery eyes, redness

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

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. 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

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 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
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

Seveso category: P8

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: 3 information on ingredients 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, 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, 10.1. Reactivity, 10.2. Chemical stability, 10.3. Possibility of hazardous reactions, 10.4. Conditions to avoid, 10.5. Incompatible materials, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.6. Endocrine disrupting properties, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of hazard statements set out in paragraph 3

H271 = May cause fire or explosion; strong oxidiser.
H302 = Harmful if swallowed.
H314 = Causes severe skin burns and eye damage.
H318 = Causes serious eye damage.
H332 = Harmful if inhaled.
H335 = May cause respiratory irritation.
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. 1: 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 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 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

Issued on 09/15/2021 - Rel. # 10 on 09/15/2021

19 / 19

In conformity to Regulation (EU) 2020/878

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 to Reg. (UE) 878/20 - regulatory information

Geowin SDS rel. 10 - Use - Industrial

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#10 09/15/21

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.