# **AEB**

#### SAFETY DATA SHEET

#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#1/24

In conformity to Regulation (EU) 2015/830

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

#### 1.1. Product identifier

Product name: PERACID

Product code: refer to sales department

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

Aqueous solution of Oxidising agents and bleaches

Sectors of use:

Industrial Manufacturing[SU3], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Product category:

Washing and Cleaning Products (including solvent based products)

Process categories:

Use in closed process, no likelihood of exposure[PROC1], Use in closed, continuous process with occasional controlled exposure[PROC2], Transfer of substance or preparation (charging/discharging) from/to ves- sels/large containers at non-dedicated facilities[PROC8A], Transfer of substance or preparation (charging/discharging) from/to ves- sels/large containers at dedicated facili- ties[PROC8B], Treatment of articles by dipping and pouring[PROC13], Application with rollers or brushes

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

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AEB OCEANIA PTY LTD 178A Wakaden Street Griffith NSW 2680 T: 1300 704 971

Email: aeboceania@aeb-group.com - Internet: www.aeb-group.com

#### 1.4. Emergency telephone number

AEB SpA

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



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#2/24

In conformity to Regulation (EU) 2015/830

AEB BIOCHEMICAL USA

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

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AEB AFRICA (PTY) LTD

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

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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:

GHS02, GHS05, GHS07, GHS09

Hazard Class and Category Code(s):

Org. Perox. D, Met. Corr. 1, Acute Tox. 4, Skin Corr. 1, Eye Dam. 1, STOT SE 3, Aquatic Chronic 1

Hazard statement Code(s):

H242 - Heating may cause a fire.

H290 - May be corrosive to metals.

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

H335 - May cause respiratory irritation.

H410 - Very toxic to aquatic life with long lasting effects. (Acute toxicity M-factor = 0)

The product is unstable and can catch fire in contact with heat sources

The product can be corrosive to metals

Corrosive product: causes severe skin burns and eye damage.

If inhaled, the product causes irritations to the respiratory tract.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

The product is dangerous to the environment as it is very toxic to aquatic life with long lasting effects

#### 2.2. Label elements

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

Pictogram, Signal Word Code(s):

GHS02, GHS05, GHS07, GHS09 - Danger

Hazard statement Code(s):

H242 - Heating may cause a fire.

H290 - May be corrosive to metals.

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H314 - Causes severe skin burns and eye damage.

H335 - May cause respiratory irritation.

H410 - Very toxic to aquatic life with long lasting effects. (Acute toxicity M-factor = 0)











#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#3/24

In conformity to Regulation (EU) 2015/830

Supplemental Hazard statement Code(s):

EUH071 - Corrosive to the respiratory tract.

Precautionary statements:

Prevention

P210 - Keep away from clothing and other combustible materials.

P260 - Do not breathe vapours/spray.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P370+P378 - In case of fire: Use Spray Water to extinguish

Disposal

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

Contains:

acetic acid, hydrogen peroxide, peracetic acid.

Contains (Reg.EC 648/2004):

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

Inhalation: harmful if inhaled. At high vapour/fog concentrations: Possible irritation of respiratory system. Vapours by thermal decomposition of the product: Risk of irritation to the respiratory system. May cause respiratory irritation. Corrosive to the respiratory tract.

Skin Contact: harmful in contact with skin. Causes severe skin burns and eye damage.

Eyes Contact: causes severe skin burns and eye damage.

Ingestion: harmful if swallowed. Causes serious or permanent damage. Swallowing results in severe corrosive effects on the mouth and throat and perforation of the esophagus and stomach. The ingestion of large quantities of this product may cause the following: esophageal perforation danger and stomach.

Environmental Effects: harmful to fish. Harmful Daphnia. Toxic to algae. Readily biodegradable. Very toxic to aquatic life with long lasting effects. This substance/mixture does not meet the PBT criteria of REACH, annex XIII. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Physical and chemical hazards: heating may cause a fire. May be corrosive to metals. The product can rapidly decompose if heated or mixed with other incompatible chemical compounds (See Section 10.5). Thermal decomposition giving flammable and toxic products. Do not mix directly with amines, oxidizing agents, acids and alkalis especially in concentrated form, liquid oxygen, nitric acid, ozone, mineral acids. Store in a cool place away from heat or direct sunlight. Decomposition products: see section 10. Major adverse effects: See sections 9 to 12.

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.

For professional use only



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#4/24

In conformity to Regulation (EU) 2015/830

#### 3.1 Substances

Irrilevant

#### 3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACh
Hydrogen peroxide	> 20 <= 22%	Ox. Liq. 1, H271; Acute Tox. 4, H302; Skin Corr. 1A, H314; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Chronic 3, H412	008-003-00-9	7722-84-1	231-765-0	01-2119485 845-22-XXX X
Acetic acid	>= 15 <= 17%	Flam. Liq. 3, H226; Skin Corr. 1A, H314	607-002-00-6	64-19-7	200-580-7	01-2119475 328-30-XXX X
Peracetic acidB D	>= 8,5 < 9,5%	EUH071; Flam. Liq. 3, H226; Org. Perox. D, H242; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1A, H314; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Chronic toxicity M-factor = 10	607-094-00-8	79-21-0	201-186-8	01-2119531 330-56-XXX X

#### **SECTION 4. First aid measures**

#### 4.1. Description of first aid measures

#### General advice

Action Immediately. Consult a doctor quickly. Don't drink or Do not induce vomiting if the patient is unconscious. Under the shower: Take off immediately all contaminated clothing. Including shoes. Risk of ignition. In case of splashes, remove contaminated clothing and plunge it into water immediately. Never give anything by mouth to an unconscious person. If you feel unwell seek medical advice (if possible, show the label). Symptoms of intoxication may appear even after several hours. It is recommended that the injured person remains under medical observation for at least 48 hours after the accident. In case of irregular breathing or respiratory arrest, practice artificial respiration.

Inhalation: take the injured person away from the contaminated area. Move out of dangerous area. If the injured person shows any signs of breathing-insufficiency, give artificial respiration by means of a self-expanding balloon mask (AMBU). Immediate medical attention is required. In case of problems: Hospitalise. Immediately take the injured person to the nearest first-aid post. Show this safety data sheet to the doctor in attendance. Keep under medical surveillance. Immediately call a POISON CENTER or doctor/physician.

In case of eye contact: react immediately. Rinse thoroughly with running water, keeping well back from the eyelid from the eye. Immediately take the victim to an ophthalmologist. Do not treat the eye with ointments or oils. Do not use eyewash or ointment of any kind before obtaining an examination or advice. Call a POISON CENTER or physician. Do not treat injured eyes with any ointments or oils.

In case of skin contact: remove the accidentally contaminated clothes immediately; wash any affected skin area with



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#5/24

In conformity to Regulation (EU) 2015/830

plenty of lukewarm water and soap. Should there be persistent skin reddening or irritation; take the injured person to the nearest first-aid post for burns treatment. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. If skin irritation persists, call a physician.

If swallowed: do not induce vomiting. Rinse mouth immediately. Clean mouth with water, if the subject is conscious, and immediately send the victim to the nearest hospital. Get medical attention immediately by calling a physician or a poison control centre. Rinse mouth with water and immediately take him to the nearest first-aid post. Keep respiratory tract clear. Do NOT induce vomiting. Call a physician immediately. Contact a poison control center. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Call a physician immediately. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting. Pay attention to perform gastric lavage, Hazard of foam reflux. The ingestion of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the digestive tract, with hemorrhage and fluid loss. Aspiration during induced vomiting can result in severe lung damage. Do NOT induce vomiting. Call a POISON CENTER or physician.

#### First Aid - Tips

If swallowed, do not induce vomiting. Rinse mouth immediately. Rinse the mouth with water and seek medical attention. Do not induce vomiting. Rinse mouth and lips with water if the person is conscious, then hospitalize.

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

The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Inhalation: harmful if inhaled. At high vapour/fog concentrations: Possible irritation of respiratory system. Vapours by thermal decomposition of the product: Risk of irritation to the respiratory system. May cause respiratory irritation. Corrosive to the respiratory tract.

Skin Contact: harmful in contact with skin. Causes severe skin burns and eye damage.

Eyes Contact: causes severe skin burns and eye damage.

If swallowed: harmful if swallowed. Causes serious or permanent damage. Swallowing results in severe corrosive effects on the mouth and throat and perforation of the esophagus and stomach. The ingestion of large quantities of this product may cause the following: esophageal perforation danger and stomach.

Principal symptoms and effects of Overexposure: adverse symptoms may include the followings: respiratory tract irritation, coughing. Ingestion: stomach pains. Skin contact: Causes severe skin burns. Eye contact: Causes severe eye damages. It causes severe burns.

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

If you feel unwell, seek immediate medical attention. If possible, show the safety data sheet or product label. Basic first aid (refer to Section 4.1) and symptomatic treatment.

Notes to physician: Treat symptomatically. In the case where large quantities have been ingested or inhaled, contact a poison control centre immediately. This material is severely corrosive to the eyes and may cause delayed keratitis. If swallowed, do not induce vomiting. Do rinse the mouth with water and immediately send the victim to the nearest hospital. The ingestion of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the digestive tract, with hemorrhage and fluid loss. Aspiration during induced vomiting can result in severe lung damage. Do NOT induce vomiting. Call a POISON CENTER or physician. People with diseases of the skin, eyes or pre-existing respiratory may run a greater risk with respect of the irritant or corrosive properties of this material. Treat any additional effects symptomatically. Contact a poison control center for further treatment information. Attending physician should treat exposed patients symptomatically. Contact a Poison Control Center for additional treatment information.



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#6/24

In conformity to Regulation (EU) 2015/830

#### 5.1. Extinguishing media

Suitable extinguishing media: suitable Extinguishing Media: Water Spray, alcohol resistant foam, dry chemical products, powder, CO2. Fight larger fires with Water Spray or alcohol resistant foam. Always use water as an extinguisher, preferably broken up, keeping windward and at a safe distance. Cool down both the containers which have been involved in the fire and the surrounding area. Do not start cleaning the area or salvaging the goods before the whole area has completely cooled down. In case of product decomposition, this is detectable by the formation of fumes and by containers overheating, cools down with water.

Unsuitable Extinguishing Media: unsuitable Extinguishing Media: Halones, Water with full jet.

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

Special hazards arising from the substance or mixtur

Specific hazards: it can promote the ignition of combustible materials. It can release oxygen during the decomposition phase. Released oxygen accelerates the combustion of flammable materials If not properly cooled the fire can easily resume. Oxygen that develops during decomposition can promote combustion in the event of a fire. In case of danger, cool the containers with water spray or water mist. Heating may cause a fire. Do not breathe fumes / vapors. The heat of the fire may decompose the peroxides/products present in the area. Decomposition may occur under effect of heating (See also Section Hazardous decomposition products). If involved in a fire, it will support combustion. The oxygen that develops during the decomposition, can contribute to the combustion in case of fire. In case of fire of if heated a pressure increase into the container will occur, that situation can cause them to burst. The main products of combustion are: Hydrocarbons, Carbon Dioxide, Carbon Monoxide, and Water. The main products of decomposition: Oxygen, see no point 10 - Stability and Reactivity. Exposure to products of combustion or decomposition can cause adverse health effects. Formation of toxic products through combustion.

#### 5.3. Advice for firefighters

Use personal protective equipment. Fire-fighters must wear fire resistant protective equipment. Wear self contained breathing apparatus and appropriate protective clothing including gloves and eye/face protection. Fight fire from a distance (more than 15 m). Cool the containers with water spray or water mist. Use water spray to cool unopened containers. In case of fire, remove all containers exposed to fire. Prohibit all sources of sparks and ignition - Do not smoke. Do not let that the extinguishing media to enter drains or watercourses. Collect contaminated fire extinguishing water separately. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Special protective devices (see also section 8): Use protection for the respiratory tract. Wear full fire prevention gear. The firefighters must always wear the complete equipment of fire protection: Use full mask with filter type A for gases / vapors [Ref. EN 143] or breathing apparatus with air supply [Ref. EN 317]; fireproof clothing [Ref. EN 469); boots firefighters [Ref. HO A29-A30]; fireproof gloves [Ref. EN 659]. Protective measures to be taken: Remove containers from fire area, if this can be done without risk. Alternatively, cool the containers in order to avoid overheating (excessive increase in pressure can cause the outbreak) and the development of fumes/gases/vapors irritating/toxics. Damaged containers should only be handled by experienced, trained and licensed staff. If possible, operate windward and safety distance, using hoses, or automatic fire extinguishing systems with nozzles positioned above the containers. Prevent the contaminated extinguishing water from flowing into drains or waterways. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

#### Additional information

Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition. Cool closed containers with water. Cool the containers with water spray or water mist. Cool closed containers with water, keeping windward and at a safe distance. Combustion products. Carbon oxides. Fire will produce smoke containing hazardous combustion products (see section 10).

#### Fire and explosion hazard

CAUTION: reignition may occur. Decomposition under effect of heating (See also Section Hazardous decomposition



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#7/24

In conformity to Regulation (EU) 2015/830

products). If involved in a fire, it will support combustion. In case of fire of if heated a pressure increase into the container will occur, that situation can cause them to burst. The main products of combustion are: Hydrocarbons, Carbon Dioxide, Carbon Monoxide, and Water. Combustion may produce acetic acid, irritating vapors and oxygen. Combustion or thermal decomposition will evolve toxic and irritant vapours. Decomposition/Combustion products may include the following materials: Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Oxides of phosphorus, Carbon Dioxide, Carbon Monoxide, and Water.

#### **SECTION 6. Accidental release measures**

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

#### 6.1.1 For non-emergency personnel:

Personal precautions, protective equipment and procedures during an emergency. Ensure adequate ventilation. Do not breathe dust or vapor. Use suitable protective clothing and gloves and protect eyes / face. Protective equipment: Wear protective clothing, gloves and eye / face protection. Wear a recommended respirator. Avoid contact with skin and eyes. Do not breathe gas / fumes / vapors / aerosols. Emergency procedures: If spillage occurs on the ground, signal the danger and prevent local authorities. Ensure good ventilation of the area. Evacuate and restrict access. Remove all combustion sources.

#### 6.1.2 For emergency responders:

Personal precautions, protective equipment and emergency procedures: ensure adequate ventilation. Avoid inhalation, ingestion and contact with skin and eyes. Keep people away from and upwind of spill/leak. Use personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment. For non-emergency workers: Remove from the affected area people not involved in the emergency. Alerting inside emergency workers or firefighters. In case of an immediate action is needed to refer to the guidelines/instructions for emergency workers. For emergency workers: Wear an appropriate Personal Protective Equipment: Breathing apparatus with air reserve or full-face gas mask with filter (AEBK). Wear suitable protective clothing (Acid Proof). Stop leak and sources of ignition if you can do it without risk. Provide adequate ventilation. Keeping windward and at a safe distance. Avoid coming into contact with the substance or handling containers without adequate protection. Use water spray to reduce vapours or to redirect the movement of the cloud. Segregate the area until complete dispersion of the substance. If possible, operate windward and safety distance, using hoses, or automatic fire extinguishing systems with nozzles positioned above the containers. Avoid contact with ignition sources. Avoid direct contact with the product and do not breathe fumes or vapours. Use personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment full-face gas mask with filter (AEBK). Use the personal protective equipment described in paragraph 8.

#### 6.2. Environmental precautions

Avoid direct discharge into the sewer, in surface waters and in the groundwater. Do not allow contact with soil, surface or ground water. Do not release into the environment. Do not let product enter drains. Dilute with plenty of water. If the product contaminates rivers and lakes or drains inform respective authorities in accordance with local laws. Do not allow to enter sewers/ surface or ground water. Do not contaminate water with the material. Do not contaminate surface water. In case of large spillage the environmental authority should be informed. Soak up with absorbent material (e.g. Vermiculit), inform environmental authority and dispose of in accordance with government regulations. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See section 8.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see section 13). Collect the spilled material and absorbent non-combustible (perlite, vermiculite, or sand) in open containers and clean polyethylene and/or polyethylene buckets. Do not use rags, sawdust, paper or other combustible/flammable materials (danger of spontaneous combustion). Keep contents moist

#### 6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

# **AEB**

#### SAFETY DATA SHEET

#### **PERACID**

Issued on 06/04/2019 - Rel. #9 on 06/04/2019

#8/24

In conformity to Regulation (EU) 2015/830

#### **SECTION 7. Handling and storage**

#### 7.1. Precautions for safe handling

Apply the legislation regarding the Industrial Hygiene/Safety job. Handle in accordance with good industrial hygiene and safety practice. During the operation use the individual protective devices. See section 8. Prohibit all sources of sparks and ignition - Do not smoke into the working area during the handling and the storing of the product. Do not eat, drink or smoke while handling it. Avoid: Direct contact with skin and eyes; inhalation of the vapors and fumes. Handle in well ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid any kind of loss and/or leakage. Keep container tightly sealed. Do not mix/pollute with other substances that may cause its decomposition. Protect from contamination. Cure scrupulously cleaning of the containers used for picking up and transferring. Use only very clean containers and equipment free from traces of impurities. Never return any product to the container from which it was originally removed (risk of decomposition). Handle and open container with care (risk of overpressurization in containers). Provide appropriate exhaust ventilation at machinery. Do not reuse empty container before they have been subjected to cleaning. Before performing transfer operations make sure that the tank does not contain residues of incompatible substances. Storage and handling precautions applicable to products: Organic Peroxides Liquid, Corrosive, Harmful, Very toxic to aquatic life with long lasting effects. Provide appropriate exhaust ventilation at machinery. Provide showers, eve-baths, Provide water supplies near the point of use. Provide self-contained breathing apparatus nearby. Provide fire-blanket nearby. In case of insufficient ventilation, wear suitable respiratory equipment. Take off immediately all contaminated clothing. Prohibit contact with skin and eyes and inhalation of vapours. When using do not eat, drink or smoke. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas. The Suitable materials which can bear the contact with peroxides, and which are consequently suitable for the construction of peroxides containers, dispensers, etc., are glass or ceramic, polyethylene, High density polyethylene (HDPE), Polytetrafluoroethylene (PTFE), polyvinylidene difluoride (PVDF). Stainless steel, AISI 304 or 316 stainless steel, the latter before use must be suitably pickled and passivated. To be avoided: Ordinary metals (ordinary steel), copper, rubber (natural or synthetic), Glass - Stoneware (risk of contents spurting or spraying out if container ruptures due to overpressurization). Recommended: High density polyethylene. See also section 8 to refer to the recommended devices. See Section 10.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.

#### 7.3. Specific end use(s)

Industrial Manufacturing:

Apart from the uses described in section 1.2, no other specific uses are contemplated. For special / particular applications, consult the supplier.

Public domain (administration, education, entertainment, services, craftsmen):
Apart from the uses described in section 1.2, no other specific uses are contemplated. For special / particular

applications, consult the supplier.

See the annex exposure scenario.

#### SECTION 8. Exposure controls/personal protection

#### 8.1. Control parameters

Related to contained substances: Hydrogen peroxide: Limit value – Eight hours (ppm)/(mg/m3)



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#9/24

In conformity to Regulation (EU) 2015/830

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

Singapore: 1/1,4 South Korea: 1/1,5 Spain:1/1,4 Sweden: 1/1,4 Switzerland: 0,5/0,71 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

Singapore: x/x South Korea: x/x Spain: x/x

Sweden: 2(1)/3(1) Switzerland: 0,5/0,71 USA – NIOSH: x/x USA – OSHA: x/x United Kingdom: 2/2,8

#### Remarks

Finland: (1) 15 minutes average value Ireland: (1) 15 minutes reference period

Sweden: (1) Celling limit value

Acetic acid:

Limit value/Eight hours

(ppm)/(mg/m3) Australia: 10/25 Austria: 10/25 Belgium: 10/25 Canada-Ontario: 10/x Canada-Québec: 10/25 Denmark: 10/25

European Union: 10/25 Finland: 5/13

France: x/x



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#10/24

In conformity to Regulation (EU) 2015/830

Germany (AGS): 10/25 Germany (DFG): 10/25

Hungary: x/25 Ireland: 10/25 Italy: 10/25 Latvia: 10/25 New Zealand: 10/25

People's Republic of China: x/10

Poland: x/15 Singapore: 10/25 South Korea: 10/25 Switzerland: 10/25 Turkey: 10/25 USA-NIOSH: 10/25 USA-OSHA: 10/25

United Kingdom: [10]/[25]

Limit value/Short term

(ppm)/(mg/m3) Australia: 15/37 Austria: 20-50 Belgium: 15/38 Canada-Ontario: 15/x Canada-Québec: 15/37

Denmark: 20/50 European Union: x/x Finland: 10(1)/25(1) France: 10/25

Germany (AGS): 20(1)/50(1) Germany (DFG): 20/50

Hungary: x/25 Ireland: 15(1)/37(1)

Italy: x/x Latvia: x/x

New Zealand: 15/37

People's Republic of China: x/20(1)

Poland: x/30 Singapore: 15/37 South Korea: 15/37 Spain: 15/37

Sweden: 10(1)/25(1) Switzerland: 20/50

Turkey: x/x

USA-NIOSH: 15(1)/37(1)

USA-OSHA: x/x

United Kingdom: [15]/[37]

#### Remarks

Austria: Indicative Occupational Exposure Limit Values, proposal [5] ~ (for reference see bibliography)

Finland: (1) 15 minutes average value

Germany (AGS): (1) 15 minutes average value Germany (DFG): STV 15 minutes average value

Ireland: (1) 15 minutes reference period

People's Republic of China: (1) 15 minutes average value Sweden: (1) Short-term value, 15 minutes average value

Tipo OEL: UE - LTE(8h): 25mg/m3, 10ppm

Tipo OEL: ACGIH - LTE(8h): 10ppm, - STEL: 15 ppm - Note: URT and eye irr, pulm func



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

In conformity to Regulation (EU) 2015/830

Peracetic acid:

Fonte Data Valore Valore (ppm) Valore (mg/m3) OEL (IT) ---- Fonte del valore limite: ACGIH ACGIH (US) 2012 TLV-ST 0.4 ppm 1.24 mg/m3

Inhalable fraction and vapor TLV-STEL 15 min

- 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/I)

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

Sea water =  $0.0126 \, (mg/I)$ 

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: Acetic acid

DNEL

Local effects Long term Workers inhalation = 25

Local effects Long term Consumers inhalation = 25 (mg/m3)

Local effects Short term Workers inhalation = 25 (mg/m3)

Local effects Short term Consumers inhalation = 25 (mg/m3)

**PNEC** 

Sweet water =  $3.058 \, (mg/l)$ 

sediment Sweet water = 11,36 (mg/kg/sediment)

Sea water = 0.3058 (mg/I)

sediment Sea water = 1,136 (mg/kg/sediment)

intermittent emissions = 30,58 (mg/l)

STP = 85 (mg/l)

ground = 0,47 (mg/kg ground)

- Substance: Peracetic acid

Systemic effects Long term Workers inhalation = 0.56 (mg/m3)

Systemic effects Long term Consumers inhalation = 0,28 (mg/m3)

Systemic effects Long term Consumers oral = 1,25 (mg/kg bw/day)

Systemic effects Short term Workers inhalation = 0,56 (mg/m3)

Systemic effects Short term Consumers inhalation = 0,28 (mg/m3)

Systemic effects Short term Consumers oral = 1,25 (mg/kg bw/day)

Local effects Long term Workers inhalation = 0,56

Local effects Long term Consumers inhalation = 0,28 (mg/m3)

Local effects Short term Workers inhalation = 0,56 (mg/m3)

Local effects Short term Consumers inhalation = 0,28 (mg/m3)

**PNEC** 

Sweet water = 0,000094 (mg/l)

sediment Sweet water = 0,000077 (mg/kg/sediment)

Sea water =  $0.000009 \, (mg/l)$ 

sediment Sea water = 0,000015 (mg/kg/sediment)

intermittent emissions = 0,0016 (mg/l)

STP = 0.051 (mg/I)

#11/24



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#12/24

In conformity to Regulation (EU) 2015/830

ground = 0,32 (mg/kg ground)

#### 8.2. Exposure controls









#### Exposure controls

Use personal protective equipment compliant with the standards of European and national regulations. In any case, consult the vendor before making a definitive decision on the devices to be fitted. The following information relates to uses in subsection 1.2. For handling and application instructions refer to the product information sheet, if available. For this section, normal operating conditions are assumed. Recommended Safety Measures for Pure Product Handling: Including activities such as filling and transferring products to use equipment, vials or containers. If the product is diluted using specific metering systems without splashing or direct contact with the epidermis, the personal protective means as described in this section may be attenuated. Avoid direct contact and / or sketching whenever possible. Train the staff. General protective measures: Provide sufficient air exchange and/or exhaust in work rooms. Use personal protective equipment conforming to the standards required by European legislation and national reference. Consult in each case the supplier before making a final decision on which acquire devices. The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section. Recommended safety measures for handling the undiluted product: Covering activities such as filling and transfer of product to application equipment, flasks or buckets. If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required. Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

#### Industrial Manufacturing:

Use in closed processes (for example transfer in closed circuit). The working area shall be provided with suitable ventilation system in order to keep the product concentration rate in the air at a low level. It must be ensured good local ventilation and a good system of air supply. If these measures are not sufficient to maintain concentrations of vapours below the exposure limit, it is necessary to make use of appropriate respiratory protection of the respiratory tract. Emergency-shower and facilities for rinsing eyes must be accessible. Launder clothes before reuse. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### Public domain (administration, education, entertainment, services, craftsmen):

Use in closed processes (for example transfer in closed circuit). The working area shall be provided with suitable ventilation system in order to keep the product concentration rate in the air at a low level. It must be ensured good local ventilation and a good system of air supply. If these measures are not sufficient to maintain concentrations of vapours below the exposure limit, it is necessary to make use of appropriate respiratory protection of the respiratory tract. Emergency-shower and facilities for rinsing eyes must be accessible. Launder clothes before reuse. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### 8.2.2 Individual protection measures:

#### (a) Eye / face protection

Wear sealed safety glasses (EN166) and/or face shield during manipulation/transfer. The use of a full-face mask or other full-face protection is strongly recommended when handling open containers or in case there is the possibility of splashing. Install emergency eye sources close to the Area of Use. Provide showers, eye-baths. Provide water supplies near the point of use.

#### (b) Skin protection

Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing. Suitable protective footwear. Remove contaminated clothing and wash before re-use.



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#13/24

In conformity to Regulation (EU) 2015/830

#### (i) Hand protection

Gloves with adequate chemical resistance tested to EN374 and with specific activity training. Carry out a basic training of staff so that exposure is minimized and you can report any skin problems. Check the instructions regarding permeability and breakthrough time, indicated by the supplier of the gloves. Consider that due to several factors, such as temperature and the conditions of use, the breakthrough time can vary from those indicated in the standard. Skin Protection Effectiveness: 95%. Material: butyl rubber (0,5 mm > 8h), neoprene, Nitrile Rubber, glove thickness: 0.5 mm Breakthrough time: > = 8 h (90% protection). Suggested gloves for prolonged contact: Material: butyl-rubber Break through time: > = 480 min. Material thickness: > = 0.7 mm. Suggested gloves for protection against splashes: Material: Nitrile rubber Break through time: > = 30 min. Material thickness: > = 0.4 mm. Check status before using. Avoid contact with eyes and skin and wear suitable protective gloves when handling and check their condition before use. Gloves should be replaced immediately if there is a noticeable degradation phenomenon. Remarks: After contact clean skin carefully. Rinse off any skin contamination immediately. Avoid direct skin contact with the product. Identify potential areas for indirect skin contact. Wear suitable gloves (EN374) if hand contact with substance is likely. Remove impurities/spills as soon as they arise.

#### (ii) Other

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash contaminated clothing before re-use. Remove and wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

#### (c) Respiratory protection

None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, 89/686/EEC), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization. In case of insufficient ventilation. In case of insufficient ventilation or during emergency, wear suitable respiratory equipment: Use breathing apparatus or masks with type "A" filter. Filters for gases / vapors EN141. In normal conditions of use and the conditions for the use of the product respiratory protection equipment is not needed. In some situations, such as a spray application in industrial areas, respiratory protection equipment is needed (eg. Facial mask with NO type cartridge). Check Exposure scenarios if they are available. Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated equipment (respirator with Filter A): European Cartridges Draeger multipurpose type (A2B2E2K1P2) Combination 3M Cartridge / Filter: 60922, 60923 or 60926, 3M multipurpose type (ABEK2P3), 3M Acid Gas (AG) 6002, Organic Vapor / Acid gas (OV / AG) 6003, Multigas (MG / V) 6006. Filter ABEK recommended.

#### (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 requirements of environmental protection legislation. In some cases, you will need to run the fume scrubbers, filters or engineering modifications to the process equipment to reduce emissions to acceptable levels. Use preferably pumping techniques to deposit or download. Avoid subsoil penetration. Do not contaminate surface water. If the product contaminates rivers and lakes or drains inform respective authorities in accordance with local laws. See Section 6.

#### **SECTION 9. Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Clear colorless liquid	
Odour	pungent similar acetic acid	
	not determined as considered not relevant for the characterization of the product	



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#14/24

#### In conformity to Regulation (EU) 2015/830

Physical and chemical properties	Value	Determination method
рН	<= 2.0 (20 ° C)	
Melting point/freezing point	-3050 ° C (sol.15%)	
Initial boiling point and boiling range	> 100 ° C (sol.15%)	
Flash point	68-81 ° C (closed cup ASTM D3278, EU Method A.9)	ASTM D92
Evaporation rate	not determined as it is 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	Lower limit (% vol.): 4 upper limit (% vol): 17	
Vapour pressure	> 14 hPa (20 ° C)	
Vapour density	not determined as it is considered not relevant for the characterization of the product	
Relative density	1,120-1,130 (d 20/20)	
Solubility	in water	
Water solubility	miscible in all proportions	
Partition coefficient: n-octanol/water	not determined as it is considered not relevant for the characterization of the product	
Auto-ignition temperature	> 280 ° C (sol.15%	
Decomposition temperature	65 ° C SADT (sol.15%)	
Viscosity	1.50 mm2 / s dynamic - 1.22 mm2 / s static	
Explosive properties	not explosive	
Oxidising properties	organic peroxide	

#### 9.2. Other information

SADT (Self Accelerated Decomposition Temp): 65°C

Surface Tension mN/m at 20°C: 47.7 (Peracetic Sol. 15%) - 54 (Peracetic Sol. 5%)

Henry's law constant Pa m3 mol -1: 0.217 Pa m3 mol -1 COV Content VOC - EU 245,00 g/l VOC - CH 16,00 %

Active oxygen content: 11,5 - 12,0% w/w

Miscibility with Solvents: n-Heptane: < 10 g/l, p-Xylene: < 10 g/l, 1,2 Dichloroethane: < 10 g/l, Propan-2-ol: > 500 g/l

Acetone: > 500 g/l, Ethyl acetate: 20-25 g/l, See point 10.

#### **SECTION 10. Stability and reactivity**

#### 10.1. Reactivity

Stable under recommended storage conditions. The product is stable under normal handling and storage conditions. This product can react quickly and violently when mixed with incompatible chemicals or heated. Do not mix directly with metal salts, promoters, acids ans bases especially in concentrated form, reducing agents, organic and flammable substances. Do not mix with bleach or other chlorinated products – will cause chlorine gas. Store away from chlorinated products or sulfites. Contact with incompatible materials such as acids, alkalies, heavy metals and reducing agents will result in hazardous decomposition. Reactive and oxidizing agent. Organic peroxide.

#### 10.2. Chemical stability

Stable under recommended storage conditions. Under the recommended conditions of storage and handling the product it is stable for at least 12 months from date of production. No decomposition if used and stored according to specifications. No decomposition is evident if the product is used and stored, following the specifications. The contact



#### **PERACID**

Issued on 06/04/2019 - Rel. #9 on 06/04/2019

#15/24

In conformity to Regulation (EU) 2015/830

with incompatible substances can cause decomposition. To maintain quality store in original closed container below: 30°C. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the following temperature: 60°C (SADT). Contact with incompatible Substances can cause decomposition at or below the SADT value.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. May produce explosive reactions with Acetic Anhydride. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition. The product is stable under normal storage and use conditions, in this case hazardous reactions will not occur. It can rapidly decompose if heated or mixed with other incompatible chemical compounds (risk of exothermic decomposition). It is therefore necessary to avoid the product coming into contact with all kinds of metallic salts; promoters; acids and alkalis, especially if in a concentrated form; any reducers and all organic and flammable compounds. Stable under recommended storage conditions. In case of decomposition is observed increase of temperature and emission of fumes. The oxygen that develops during the decomposition, in the event of fire, may support the combustion of flammable/combustible substances. In case of fire of if heated a pressure increase into the container will occur, that situation can cause them to burst.

#### 10.4. Conditions to avoid

Temperatures below - 10°C - Temperatures above 30°C. Store in a cool, well ventilated position. To avoid thermal decomposition do not overheat. Store at temperatures not exceeding 30°C. Keep away from heat and direct sunlight. The product can decompose rapidly when mixed with incompatible chemicals or heated. It is therefore necessary to avoid the product coming into contact with all kinds of metallic salts; acids and alkalis, especially if in a concentrated form; any reducers and all organic and flammable compounds. Strong oxidizing agents, Powerful reducers, Strong acids, strong bases, Sulphur compounds, heavy metal compounds, heavy metals, rust, Ash, dusts (risk of self-accelerating exothermic decomposition), Acetone, Possible formation of: explosive compounds or those sensitive to impact. Do not mix with peroxide accelerators. Avoid contact with rust, iron and Metals. Store in a well ventilated place away from sources of heat and direct sunlight. Use, only, compatible materials listed at point 7. Confinement must be avoided. Heat, flames and sparks.

#### 10.5. Incompatible materials

Contact with incompatible materials will result in hazardous decomposition. For queries regarding the suitability of other materials please contact the supplier. Do not mix with peroxide accelerators, unless under controlled processing. Use only stainless steel 316, PP, polyethylene or glass-lined equipment. It is therefore necessary to avoid the product coming into contact with all kinds of metallic salts; acids and alkalis, especially if in a concentrated form; any reducers and all organic and flammable compounds. Strong oxidizing agents, Powerful reducers, Strong acids, strong bases, Sulphur compounds, heavy metal compounds, heavy metals, rust, Ash, dusts (risk of self-accelerating exothermic decomposition), Follow conditions of use with: accelerators (amines, metallic salts), Acetone. Oxidizing agents; Strong reducing agents; Combustible materials; Heavy metals. such as iron, copper, chromium, nickel, aluminum and cobalt. Possible formation of: explosive compounds or those sensitive to impact. Do not mix with peroxide accelerators. Avoid contact with rust, iron and Metals. Store in a well ventilated place away from sources of heat and direct sunlight. Use, only, compatible materials listed at point 7.



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#16/24

In conformity to Regulation (EU) 2015/830

#### 10.6. Hazardous decomposition products

Decomposition products may include the following materials: Hazardous decomposition products: Oxygen, corrosive gases/vapors, Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus, acetic acid, carbon dioxide, carbon monoxide. Liable to produce overpressure in container. Acetic acid and oxygen that supports combustion. The release of other hazardous decomposition products is possible. Decomposition under the influence of heat. If involved in a fire, it will support combustion. In case of fire and/or explosion do not breathe fumes/vapours. The oxygen that develops during the decomposition, in the event of fire, may contribute to the combustion of flammable substances. In case of fire of if heated a pressure increase into the container will occur, that situation can cause them to burst.

#### **SECTION 11. Toxicological information**

#### 11.1. Information on toxicological effects

Information on toxicological effects. All available data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment. Due to its composition and Based on the available information: The substance or mixture is not classified as specific target organ toxicant, repeated exposure. Oral: Harmful if swallowed. ATE (oral route): ATE (via Oral): 623 mg/kg bw. Dermal: Harmful in contact with skin. ATE (Dermal): 590 mg/kg bw. (As two studies for acute dermal toxicity are available which cover a concentration range of 4.89 to 11.7 % PAA, and as no clear interdependence of PAA concentration and LD50 was observed in these studies, the classification derived based on these studies (i.e. acute dermal toxicity category 4, H312 according to CLP criteria) is considered to be also applicable to the biocidal products with a PAA concentration of 7.00 to 16.00 %. ATE Dermal > 2000 mg / kg bw for standard solutions up to the concentration of 16% w / w in Peracetic Acid). Inhalation: Harmful by inhalation. ATE (Inhalation): 1,700 mg/l/4h.

The toxicity data of the individual components of the preparation are:

(a) acute toxicity: 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 bleeding with the possibility of serious injury, On the animal: (as an aqueous solution). LD50 / Rat: 1,200 mg / kg (35%) - ATE value of 431 mg / kg.

Skin contact - rabbit LC50 (mg / kg / 24h bw): skin irritant. On the animal: aqueous solution. Irritating to the skin. Superficial necrosis (After semi-occlusive contact, On rabbit, Exposure time: 4 h 35%) Corrosive to the skin. On humans: The effects of skin contact may include: discoloration, erythema, edema. ATE value of 6500 mg / kg (70%) Inhalation - LC50, 4 h, rat,> 0.17 mg / I, vapor (H2O2 50%) at high concentrations of vapors / mists (maximum technically possible concentration 50%) A strong concentrations of vapors / mists: Risk of pulmonary edema, delayed effects are possible.

Acetic acid: LC50 Inhalation acetic acid (lethal conc - rat):> 16000 ppm 4h> 200 ppm 1h - ATE value of 11,400 mg / I / 4h

LD50 (lethal dose - rat): LD50 3310 - 4960 mg / kg - ATE value of 3310 mg / kg bw

LD50 Dermal acetic acid (Lethal Dose Rabbit):> 1900 mg / Kg bw - ATE value of 1060 mg / Kg bw; LD50 (Guinea pig)> 18900 mg / kg bw

Peracetic acid: LC50 Inhalation (letal dose - rat): > 500 mg/m3 4h (PAA 15%) - EPA OPP 81-3 - ATE value 0,204 mg PAA/I

LD50 Oral (letal dose - rat): 315 mg/Kg bw - 56.1-229 mg PAA/kg bw - 1147 and - 1957 mg/kg bw - ATE value of 85 mg/kg bw

LD50 Skin (letal dose - rat): > 1900 mg/Kg bw (PAA 12%) - EPA OPP 81-2 - ATE value of 56,1 mg/kg bw - ATE value of > 2000 mg/kg bw PAA < 16%

(b) skin corrosion/irritationCorrosive product: causes severe skin burns and eye damage.

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

Corrosive to the skin (after semi-occlusive contact, on rabbit, exposure time: 3 min) (50 - 70%).

Acetic acid: Corrosive for C> 25% w / w (rabbit)

Peracetic acid: Corrosive, Causes Burns, Irritant (rabbit)

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

Corrosive to the skin (after semi-occlusive contact, on rabbit, exposure time: 3 min) (50 - 70%).

Acetic acid: Corrosive for C> 25% w/w (rabbit)



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#17/24

In conformity to Regulation (EU) 2015/830

Peracetic acid: Corrosive, Causes Burns, Irritant (rabbit)

(c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage. - If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

Hydrogen peroxide: Corrosive to the eyes (H2O2> 35%) Acetic acid: Corrosive for C> 25% w / w (quinea pig)

Peracetic acid: Corrosive, Causes Burns, Extremely Irritating (rabbit)

Hydrogen peroxide: Corrosive to the eyes (H2O2> 35%) Acetic acid: Corrosive for C> 25% w / w (guinea pig)

Peracetic acid: Corrosive, Causes Burns, Extremely Irritating (rabbit)

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

Acetic acid: Does not cause sensitization.

Peracetic acid: According to its composition, can be considered as: Not a skin sensitizer

(e) germ cell mutagenicity: Hydrogen peroxide: In vitro: Genotoxic. In vivo: Not genotoxic. In vitro tests showed mutagenic effects: genotoxic. In vivo tests did not show mutagenic effects. Micronucleus test in vivo in mice: Inactive (Method: 474 OECD Test). Testing of DNA repair of rat hepatocytes: Inactive (Method: OECD 486).

Acetic acid: No adverse effect observed

Peracetic acid: No adverse effects were observed

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

Acetic acid: No adverse effect observed

Peracetic acid: No adverse effects were observed

(g) reproductive toxicity: Hydrogen peroxide: Based on the available data, the substance is not suspected of having reprotoxic potential. Based on the available data, the substance is not suspected of having developmental toxicity potential.

Acetic acid: Based on the available data, the substance is not suspected of having reprotoxic potential Peracetic acid: Oral: Drinking Water F1 - NOAEL Effect level 5 mg / kg bw / day. Oral: Drinking Water P - NOAEL

Effect level 5 mg / kg bw / day

(h) specific target organ toxicity (STOT) single exposure: If inhaled, the product causes irritations to the respiratory tract.

Hydrogen peroxide: At high vapour/fog concentrations: Irritating to respiratory system. (> 200 ppm). Inhalation, mice, 665 mg/m3 Remarks: RD 50, Irritating to respiratory system, H2O2 50%.

Acetic acid: Negative

Peracetic acid: STOT SE 3, H335. C = 1% Respiratory Tract.

(i) specific target organ toxicity (STOT) repeated exposureHydrogen peroxide: Oral, 90 days, rat, Target Organs: Gastrointestinal tract, 300ppm, LOAEL (pure substance). Oral, 90 days, rat, 100 ppm, NOAEL (pure substance) Inhalation, 28 days, rat, Target Organs: Respiratory system, 10 ppm, LOAEL, steam (pure substance) inhalation, 28 days, 2 ppm, NOAEL, steam (pure substance). By oral route: Irritation of the gastric mucosa, NOAEL= 26 mg/kg/d (rat, 3 months) (drinking water). Inhalation: Irritation of upper respiratory system, Irritating to nose, Local effects due to an irritant effect, LOAEL= 0,0029 mg/l (Method: OECD Test Guideline 407, rat, Repeated)

Acetic acid: Negative

Peracetic acid: Oral: No specific toxic effects found. NOAEL and LOAEL> 200 mg / L water based basis for effect level / Remarks based on PAA (15% in product). NOAEL and LOAEL> 29 mg / kg bw / day (actual dose received) basis for effect level / remarks based on PAA. NOAEL and LOAEL> 38 mg / kg bw / day (actual dose received).

(j) aspiration hazard: Hydrogen peroxide: Not available

Acetic acid: Negative

Peracetic acid: Not applicable

Related to contained substances:

Hydrogen peroxide:

Potential Acute Health Effects

Inhalation: irritating to respiratory system. This product causes the tissue of the mucous membranes and upper respiratory tract.

Ingestion: harmful if swallowed. May cause burns to mouth, throat and stomac.

Skin Contact: severely corrosive to the skin. Harmful in contact with skin.

Contact with eyes: May cause irreversible eye damage. Severe eye irritation.

# **AEB**

#### SAFETY DATA SHEET

#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#18/24

In conformity to Regulation (EU) 2015/830

Signs and Symptoms of Exposure

Inhalation: respiratory tract irritation, coughing.

Ingestion: stomach pains.

Skin Contact: pain or irritation, blush, possible formation bladders. Corrosive to skin.

Contact with eyes: May cause irreversible eye damage. Severe eye irritation. Pain, tearing, redness.

Acetic acid:

Potential Acute Health Effects

Inhalation: irritating to the respiratory tract. Can cause inflammation and pulmonary edema, especially if inhaled in

aerosol form.

Ingestion: Causes burns to mouth, throat and stomach burns to mucous membranes.

Skin Contact: Causes severe burns. Eye Contact: Causes severe eye damage.

Signs and Symptoms of Exposure:

Inhalation: inhalation of vapor or aerosols may cause irritation of the respiratory tract, inflammation of the respiratory tract and pulmonary edema.

Ingestion: ingestion may cause bleeding of the mucous membranes of the mouth, esophagus and stomach.

Skin Contact: causes chemical burns. With increasing duration of contact may occur redness or severe local irritation (whitish spots) until the formation of bubbles (corrosion).

Eyes Contact: strong irritant effect until a corrosive effect.

Liquid and mist are corrosive and can cause burns, direct contact could cause irreversible dmage to eyes including blindness and/or irreversible destruction of skin tissue. Vapor/mist will irritate the nose, throat and lungs, but will usually subside when exposure ceases. The severity of the effects depends in the concentration and dose.

LD50 (rat) Oral (mg/kg body weight) = 3310

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 11,4

Peracetic acid:

Potential acute health effects

Inhalation: Harmful by inhalation. Irritating to the respiratory tract. This product causes lacerations of the mucosal tissue and upper respiratory tract.

Ingestion: Harmful if swallowed. It can cause burning in the mouth, throat and stomach.

Skin contact: severely corrosive to the skin, harmful by contact with the skin.

Eye contact: Causes severe burns.

Signs and symptoms of exposure

Inhalation: respiratory tract irritation, cough.

Ingestion: stomach pains.

Skin contact: pain or irritation, redness, possible blistering.

Eye contact: pain, tearing, redness.

LD50 (rat) Oral (mg/kg body weight) = 315

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1100

#### **SECTION 12. Ecological information**

#### 12.1. Toxicity

Use this product appropriately, according the good working practices, and anvoid product dispersion in the environment (see also section 6, 7, 13, 14 e 15). Environmental Effects: Harmful to fish. Harmful to daphnia. Toxic to algae. Readily biodegradable. Practically not bioaccumulable. Very toxic to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. The risks to the aquatic environment are related, Also, to the acidification of the medium by lowering the pH value. The available EcoToxicity data about single components of the preparation, are as follows:

Hydrogen peroxide:



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#19/24

In conformity to Regulation (EU) 2015/830

Acute toxicity CE50 Static test Activated sludge (bacteria): 466 mg/l - 30 min (HP100%) NOEC Static Test Skeletonema costatum (Algae): 1,38 mg/l (growth rate) Marine environment Acute toxicity CE50 Skeletonema costatum (algae): 2,62 mg/l (HP 100%), 72 h Acute toxicity CE50 Crustacei (Daphnia pulex 48h: 2,40 mg/l, water, Semistatic (HP100%) NOEC Flow-through test with Daphnia M. (crustaceans): 0,63 mg/l - 21 d (HP100%) Acute toxicity LC50 fishes (Pimephales promelas): 16.4 mg/l - 96 h (HP100%) NOEC, fishes (Pimephales promelas): NOEC, 96 h, 5 mg/l (HP100%)

#### Acetic acid:

Acute toxicity EC50 bacteria (Anabaena flos-aquae 72h): 55,22 mg/l Acute toxicity EC50 Alghe (Sceletonema costatum 72h): > 300 mg/l Acute toxicity EC50 crustaceans (Daphnia magna 48h): > 300 mg/l Acute toxicity LC50 fish (Oncorhynchus mykiss 96h): > 300 mg/l

#### Peracetic acid:

Acute toxicity EC50 bacteria (streptococcus fec. 60m): 50 mg/l Acute toxicity EC50 Algae (Selenastrum capric. 72h): 0,16 mg/l (PAA 5%) Acute toxicity EC50 crustaceans (Daphnia magna 48h): 0,73 mg/l (PAA 5%) Acute toxicity LC50 fish (Oncorhynchus mykiss 96h): 0,53 mg/l Acute toxicity ErC10 fish (Raphidocelis subcapitata): 2,1 mg/l - OECD TG 201 NOEC (chronic Toxicity Fish) 0,001 (0,0001 - 0,001) mg/l

C(E)L50 (mg/l) = 0.16NOEC (mg/l) = 0.001 Chronic toxicity M-factor = 10

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

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

#### 12.2. Persistence and degradability

Related to contained substances:

Hydrogen peroxide:

Abiotic degradation: Air, indirect photo-oxidation, t 1/2 24 h Conditions: sensitizer: 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 to 5 d Conditions: fresh water Readily biodegradable. Anaerobic Conditions: Soil / sediments not applicable. Aerobic, t 1/2, 12 h Conditions: Soil Readily biodegradable. Readily Biodegradable (28 Days – OECD TG 301 E). The methods for determining biodegradability are not applicable to inorganic substances. Decomposition: few minutes to 24 h.

#### Acetic acid:

Readily Biodegradable (30 Giorni – OECD TG 301 E). Clayey sand: DT50: 2 days. Water: 96 % BOD after 20 days . Air: DT50: 20 days.

#### Peracetic acid:

Readily Biodegradable 87% after 28 d (Method: OECD 301D (Closed bottle test)). Peracetic acid is completely miscible with water. Aqueous solutions of peracetic acid are hydrolized in acetic acid and hydrogen peroxide. The product is biodegradable.



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#20/24

In conformity to Regulation (EU) 2015/830

#### 12.3. Bioaccumulative potential

Related to contained substances:

Hydrogen peroxide:

Partition coefficient: n-octanol/water: log Kow : = -1,57 , at 20 °C (Method: calculated)

Acetic acid:

Not bioaccumulable - log Pow= < 1 (- 0,17). BCF 3,16.

Peracetic acid:

Partition coefficient: n-octanol/water: log Kow : < 0,3 (OECD 117) Not bioaccumulable - log Pow = < 1 (- 0,26) On the basis of its low coefficient of octanol-water partition and its rapid degradation in the environment, this product is not bioaccumulating.

#### 12.4. Mobility in soil

Related to contained substances:

Hydrogen peroxide:

Soil: 750E-06 Pa.m3/mol, 20 °C, Surface tension: 73,4 mN/m % 20 °C /17%. Water solubility and mobility Soil/sediments, log KOC: 0.2 evaporation and adsorption is not significant. Air, Volatility, Henry constant, = 0.75 kPa.m³/mol Conditions: 20°C not significant. Surface tension: 75.7 mN / m % 20 ° C / 50 %.

Acetic acid:

Soil Koc 1,153

Peracetic acid:

Soil: Decomposes - half-life DT50 03 Min

The peracetic acid released into the environment is distributed almost exclusively (> 99 %) to the aquatic compartment. Only a minor part (< 1 %) will remain in the atmosphere, where it is expected to have rapid decay with a half-life of 22 minutes.

#### 12.5. Results of PBT and vPvB assessment

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

#### 12.6. Other adverse effects

No adverse effects

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

The (I) surfactant (s) content (s) in this preparation complies (comply) with (i) the biodegradability criteria as laid down in Regulation CE/648/2004 on detergents. All data are held at the disposal of the competent authorities of Member States and will be provided, at their direct request or at the request of a detergent manufacturer, to those authorities.

#### **SECTION 13. Disposal considerations**

#### 13.1. Waste treatment methods

The safety measures in the handling of surpluses and residues are described in sections 7 and 8 of this sheet. The product and the packaging must always be disposed of in compliance with local regulations. Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#21/24

In conformity to Regulation (EU) 2015/830

in discussion with the waste disposal authorities.

Product - Waste treatment methods: For safety measures about handling of excess and residuals see section 7 and 8. It is advisable to dispose the product and the packaging in strict observance with the local rules. Due to the high risk of contamination recycling/recovery is not recommended. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. The creation of waste should be avoided or minimized wherever possible. Waste disposal in accordance with regulations (most probably controlled incineration). The concentrated product or contaminated packaging by the product must be disposed of by authorized company or in accordance with the authorized locally. Release of waste into drains is strongly discouraged. The cleaned packing material is suitable for energy recovery or recycling in accordance with local legislation. The residues must be handled and disposed of as provided by local and national regulations. Do not discharge into drains and/or the environment; dispose of waste at an authorized waste collection point. See: Directive 94/62 / EC, D.L. 22/1997. Please refer to the European list (Decision no. 2000/532/EC as amended) and/or your licensed waste dispodal consultant to identify the European Refusal Code (EWC) appropriately and be sure to comply with national and regional regulations. European Waste Catalogue: 16 09 03\* - peroxides, for example hydrogen peroxide. For manipulation and measures in case of Accidental dispersion of the refusal, apply in general to the information provided in sections 6 and 7. Precautions and specific actions should be assessed in relation to the composition of the waste. Operate according to local and national regulations. For larger quantities users can contact directly AEB spa designates officies.

Contaminated packaging disposal: dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. See: Directive 94/62 / EC, D.L. 22/1997. Directive 2001/118/EC.

Product disposal: waste must be handled and disposed of as provided by local and national regulations. Before starting the combustion procedure, it is recommended to dilute the peroxide with adequate plasticizers. If the product is correctly ignited, it decomposes itself in carbon dioxide and water. Please contact your hazardous waste disposers in order to use the correct European Waste Catalogue Number (Decision 2001/573/EC, Directive 2006/12/EEC, Directive 94/31/EEC). For further advice contact AEB S.p.A.

Further Information: due to the high risk of contamination recycling/recovery is not recommended. It is advisable to dispose of the product by combustion in authorized structure. Due to the high risk of contamination recycling/recovery is not recommended. Waste disposal in accordance with regulations (most probably controlled incineration). Care should be taken when handling emptied containers that have not been cleaned or rinsed out. For the manipulation and the provisions in case of accidental dispersion of the waste, the indications are worth in general furnished to the sections 6 and 7. Cautions and specific actions must be valued in relationship to the composition of the waste. Work according to the in force local and national regulations. If acidic or alkaline products are introduced in wastewater installations care must be taken that the sewage does not have a pH value that comes out of the field 6-10, since following the relocation of the pH variations could cause disorders in sewers and in biological systems purification. Local guidelines for entering wastewater Have priority validity. Persistence and Degradability: Easy and Fast to Degrade. In the tests of easy degradability, all the substances into the mixture have obtained values > 60% BOD/COD that is CO2 evolution that is > 70% of DOC decreasing. This fall into the limit values contemplated for "easily degradable / readily degradable' (OECD Method 301).

#### **SECTION 14. Transport information**

14.1. UN number

ADR/RID/IMDG/ICAO-IATA: 3109

If subject to the following characteristics is ADR exempt: Combination packagings: per inner packaging 125 ml









#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#22/24

In conformity to Regulation (EU) 2015/830

#### 14.2. UN proper shipping name

ADR/RID/IMDG: PEROSSIDO ORGANICO DI TIPO F, LIQUIDO (PeroxyAcetic Acid, Type F, Stabilized, C≤43%) ADR/RID/IMDG: ORGANIC PEROXIDE TYPE F, LIQUID (PeroxyAcetic Acid, Type F, Stabilized, C≤43%,) ICAO-IATA: ORGANIC PEROXIDE TYPE F, LIQUID (PeroxyAcetic Acid, Type F, Stabilized, C≤43%, =

#### 14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class: 5.2

ADR/RID/IMDG/ICAO-IATA: Label: 5.2+8+ Environmental

ADR: Tunnel restriction code: D

ADR/RID/IMDG/ICAO-IATA: Limited quantities: 125 ml

IMDG - EmS: F-J, S-R

#### 14.4. Packing group

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

#### 14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous

IMDG: Marine polluting agent: Yes

## 14.6. Special precautions for user

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

#### 14.7. 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. N (EU) No 98/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 January 2013 on the marketing and use of explosives precursors. This Regulation lays down harmonized rules on the making available, introduction, possession and use of substances or mixtures which can be used in a roundabout way for the illicit manufacture of explosives, in order to limit their use. Availability for the general public and to ensure that suspicious



#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#23/24

In conformity to Regulation (EU) 2015/830

transactions, at any stage of the supply chain, are duly reported. Regulation of the European Parliament and of the Council concerning the placing on the market and use of explosive precursors (EC) 15 January 2013 no. 98/2013. Regulation of the European Parliament and of the Council no. The EU 98/2013 of 15 January 2013 on the placing on the market and use of explosive precursors is the tool with which it is intended to ensure a comprehensive EU-wide approach to to minimize the differences between national regulations, by improving the functioning of the internal market and by preventing an uncontrolled regime if the prohibition is not exercised. Hydrogen peroxide (CAS RN 7722-84-1) 12% w / w - <75% w / w - 2847 00 00 - 3824 90 97. The purchase, possession or use of this explosive precursor restrictions imposed by individuals are restricted pursuant to Article 4 (1), (2) and (3). (EU REGULATION (EU) No 98/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 January 2013)

#### Seveso category:

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

REGULATION (EU) No 1357/2014 - waste:

HP8 - Corrosive HP14 - Ecotoxic

#### 15.2. Chemical safety assessment

For the substance (Peracetic Acid in Aqueous Stabilized Solution) a risk assessment has been performed (CSA). For the substances Acetic Acid and Hydrogen peroxide a risk assessment has been performed (CSA). The CSA is documented in the Chemical Safety Report (CSR) and the final ES (Exposure Scenarios) shall also be provided along the supply chain through the extended SDS.

#### **SECTION 16. Other information**

#### 16.1. Other information

Points modified compared to previous release: all sec.

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.

H332 = Harmful if inhaled.

H335 = May cause respiratory irritation.

H412 = Harmful to aquatic life with long lasting effects.

H226 = Flammable liquid and vapour.

H242 = Heating may cause a fire.

H312 = Harmful in contact with skin.

H400 = Very toxic to aquatic life.

H410 = Very toxic to aquatic life with long lasting effects.

#### 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.

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

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.

# AEB IMPROVEMENT THROUGH BIOTECHNOLOGY

#### SAFETY DATA SHEET

#### **PERACID**

Issued on 06/04/2019 - Rel. # 9 on 06/04/2019

#24/24

In conformity to Regulation (EU) 2015/830

n.a.: not applicable n.d.: not available

ADR: Accord europèen relative au transport International des merchandises dangereuses par route (European

Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimat
BFC: BioconCentration Factor
BOD: Biochemical Oxigen Demand
CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified

Chemical Substances)

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50 COD: Chemical Oxygen Demand DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

**ERC:** Enviroment Release Classes

EU/UE: European Union

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient NOEC: No Observed Effect Concentration

OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement concernent le transport International ferroviaire des merchandises dangereuses (Regulations concerning International rail transport of dangerous goods)

STOT: Target Organ Systemic Toxicity STOT (RE): Repeated Exposure STOT (SE): Single Exposure STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

vPvB: Very Persistent Very Bioaccumulative

#### References and Sources:

- ECHA Registered Substances:
- https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances
- SDS supplie
- 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: general revision



# AISE GEIS.1.1.a.v1

lederlandse Vereniging van Zeepfabrikanten

Version: 1.0, May 2014

# Using a professional product in a closed system

Operational conditions	
Maximum duration	480 minutes per day.
Process conditions	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures		
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.	

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

# **Enviromental measures**

Prevent that the undiluted product reaches surface waters.

#### Properties of product composition

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descri	ptors
SU 22	Professional use
PC 35	Washing and cleaning product
PROC 1	Use in closed process, no likelihood of exposure
ERC 8a	Wide dispersive indoor use of processing aids in open systems
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.

Disclaimer: This is a generic document for communicating conditions of safe use of a product. If a GEIS code is mentioned in Section 1 of 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 GEIS CSP documents is safe, according to the GEIS Formulator Guidance. 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 GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

The A.I.S.E. or the NVZ are under no conditions liable for any damage, no matter of what kind, which is the direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.

# **AEB ES.1.1.a.v1**

Version: 1.0, May 2014

# Using a professional product in a closed system

Operational conditions	
Maximum duration	480 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures		
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.	

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

# **Enviromental measures**

Prevent that the undiluted product reaches surface waters.

## Properties of product composition

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	ptors
SU 3	Industrial uses
PC 35	Washing and cleaning product
PROC 1	Use in closed process, no likelihood of exposure
ERC 8a	Wide dispersive indoor use of processing aids in open systems
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.

**Disclaimer:** This is a generic document for communicating conditions of safe use of a product the employer of workers that use products that are assessed as safe remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Information Sheets should always be considered in combination with the SDS and the label of the product.



# AISE GEIS.2.1.a.v1



Version: 1.0, May 2014

# Using a professional product in a semi closed system

Operational conditions	
Maximum duration	480 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to	No PPE necessary.
personal protection equipment	
(PPE), hygiene and health evaluation	

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

# **Environmental measures**

Prevent that the undiluted product reaches surface waters.

#### Properties of product composition

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	Use descriptors	
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 2	Use in closed, continuous process with occasional controlled exposure	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

Disclaimer: This is a generic document for communicating conditions of safe use of a product. If a GEIS code is mentioned in Section 1 of 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 GEIS CSP documents is safe, according to the GEIS Formulator Guidance. 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 GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

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# **AEB ES.2.1.a.v1**

Version: 1.0, May 2014

# Using a professional product in a semi closed system

Operational conditions	
Maximum duration	480 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to	No PPE necessary.
personal protection equipment	
(PPE), hygiene and health evaluation	

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

# **Environmental measures**

Prevent that the undiluted product reaches surface waters.

## Properties of product composition

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	Use descriptors	
SU 3	Industrial uses	
PC 35	Washing and cleaning product	
PROC 2	Use in closed, continuous process with occasional controlled exposure	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

**Disclaimer:** This is a generic document for communicating conditions of safe use of a product the employer of workers that use products that are assessed as safe remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Information Sheets should always be considered in combination with the SDS and the label of the product.

#### **PERACID**



# AISE GEIS.8a.1.a.v1

Version: 1.0, May 2014



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

Operational conditions	
Maximum duration	50 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to	Use gloves and safety goggles. See Section 8 of the
	SDS of this product for specifications.
(PPE), hygiene and health evaluation	
	Training of the worker in relation to proper use and maintenance of the PPE must be ensured.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	\$! \$\frac{\gamma!}{\pi}\$
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Enviromental measures**

Prevent that the undiluted product reaches surface waters.

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	Use descriptors	
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

Disclaimer: This is a generic document for communicating conditions of safe use of a product. If a GEIS code is mentioned in Section 1 of 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 GEIS CSP documents is safe, according to the GEIS Formulator Guidane. 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 GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

The A.I.S.E. or the NVZ are under no conditions liable for any damage, no matter of what kind, which is the direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.

#### **PERACID**

# **AEB ES.8a.1.a.v1**

Version: 1.0, May 2014

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

Operational conditions	
Maximum duration	50 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.
	No LEV needed; good general ventilation at workplace is sufficient.

# Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation (Present and health ev

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	\$! \$\frac{\gamma!}{\pi}\$
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Enviromental measures**

Prevent that the undiluted product reaches surface waters.

## **Properties of product composition**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descriptors		
SU 3	Industrial uses	
PC 35	Washing and cleaning product	
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

**Disclaimer:** This is a generic document for communicating conditions of safe use of a product the employer of workers that use products that are assessed as safe remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Information Sheets should always be considered in combination with the SDS and the label of the product.



## AISE GEIS.8b.1.a.v1



Version: 1.0, May 2014

#### Transfer of professional product via a dedicated system (bottle/machine)

Operational conditions	
Maximum duration	40 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	\$! <b>3!</b>
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Enviromental measures**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	Use descriptors	
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

Disclaimer: This is a generic document for communicating conditions of safe use of a product. If a GEIS code is mentioned in Section 1 of 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 GEIS CSP documents is safe, according to the GEIS Formulator Guidance.. 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 GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

# AEB ES.8b.1.a.v1

Version: 1.0, May 2014

#### Transfer of professional product via a dedicated system (bottle/machine)

Operational conditions	
Maximum duration	40 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	2: 2: X
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Environmental measures**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	Use descriptors	
SU 3	Industrial uses	
PC 35	Washing and cleaning product	
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	



# AISE GEIS.10.1.a.v1



Version: 1.0, May 2014

#### Brushing a diluted professional product

Operational conditions	
Maximum duration	480 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	\$! <b>\( \)</b>
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Enviromental measures**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descriptors		
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 10	Roller application or brushing	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

Disclaimer: This is a generic document for communicating conditions of safe use of a product. If a GEIS code is mentioned in Section 1 of 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 GEIS CSP documents is safe, according to the GEIS Formulator Guidance. 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 GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

Rel 9 – 06/04/19

#### PERACID

# **AEB ES.10.1.a.v1**

Version: 1.0, May 2014

#### Brushing a diluted professional product

<b>Operational conditions</b>	
Maximum duration	480 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.

Good practise advice	Good practise advice	
Don't eat or drink, don't smoke, no open flame		
Wash hands after use Avoid contact with damaged skin Do not mix with other products		
Spillage instructions	Dilute with water and mop up.	
Additional good practice advice	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 SDS of the used product.	

#### **Enviromental measures**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descrip	Use descriptors	
SU 3	Industrial uses	
PC 35	Washing and cleaning product	
PROC 10	Roller application or brushing	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	



## AISE GEIS.10.1.b.v1



Version: 1.0, May 2014

#### Brushing a concentrated professional product

Operational conditions	
Maximum duration	220 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.
	No LEV needed; good general ventilation at workplace is sufficient.

Risk management measures	
	Use gloves and safety goggles. See Section 8 of the
1	SDS of this product for specifications.
(PPE), hygiene and health evaluation	
	Training of the worker in relation to proper use and maintenance of the PPE must be ensured.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Environmental measures**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descriptors		
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 10	Roller application or brushing	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

**Disclaimer:** This is a generic document for communicating conditions of safe use of a product. If a GEIS code is mentioned in Section 1 of 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 GEIS CSP documents is safe, according to the GEIS Formulator Guidance. 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 GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

Rel 9 - 06/04/19

#### **PERACID**

#### **AEB ES.10.1.b.v1**

Version: 1.0, May 2014

#### Brushing a concentrated professional product

Operational conditions	
Maximum duration	220 minutes per day.
Process conditions	Process is carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.
	No LEV needed; good general ventilation at workplace is sufficient.

# Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation (Presonal protection equipment (Presonal protection e

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

# Environmental measures Prevent that the undiluted product reaches surface waters.

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descript	Use descriptors	
SU 3	Industrial uses.	
PC 35	Washing and cleaning product	
PROC 10	Roller application or brushing	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	



# AISE GEIS.13.1.a.v1



Version: 1.0, May 2014

#### Treatment of articles by dipping or pouring with a professional products

Operational conditions	
Maximum duration	50 minutes per day.
<b>Process conditions</b>	Process is carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.
	No LEV needed; good general ventilation at workplace is sufficient.

#### Risk management measures

Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation

Use gloves and safety goggles. See Section 8 of the SDS of this product for specifications.



Training of the worker in relation to proper use and maintenance of the PPE must be ensured.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Enviromental measures**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descriptors		
SU 22	Professional use	
PC 35	Washing and cleaning product	
PROC 13	Treatment of articles by dipping and pouring	
ERC 8a	Wide dispersive indoor use of processing aids in open systems	
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.	

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Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following GEIS conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, Generic Exposure Information Sheets should always be considered in combination with the SDS and the label of the product. The GEIS Guidance for End Users provides more information.

#### **AEB ES.13.1.a.v1**

Version: 1.0, May 2014

#### Treatment of articles by dipping or pouring with a professional products

Operational conditions		
Maximum duration	50 minutes per day.	
	Process is carried out at room temperature.	
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius is used.	
	No LEV needed; good general ventilation at workplace is sufficient.	

# Risk management measures

Conditions and measures related to personal protection equipment shoes. See Sec (PPE), hygiene and health evaluation specifications.

Use gloves and safety goggles, work clothes, safety shoes. See Section 8 of the SDS of this product for specifications.









Training of the worker in relation to proper use and maintenance of the PPE must be ensured.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	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 SDS of the used product.

#### **Enviromental measures**

In Section 2 of the SDS of products and on the label the classification of the undiluted product is provided.

The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.

Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.

This product may contain sensitizing ingredients, that may cause an allegric reaction in certain people. Section 2 of the SDS states these ingredients, when applicable to the product.

Use descriptors	
SU 3	Industrial uses
PC 35	Washing and cleaning product
PROC 13	Treatment of articles by dipping andpouring
ERC 8a	Wide dispersive indoor use of processing aids in open systems
	If appropriate AISE SpERC 8a.1.a.v2 may apply: Wide dispersive use in "Down the drain" cleaning and maintenance products that are treated by a municipal STP.