

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

1.1. Product identifier

Product name : PAV

Product code: refer to sales department

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

Degreaser cleaner

Sectors of use:

Industrial Manufacturing[SU3], Manufacture of food products[SU4], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Product category:

Washing and Cleaning Products (including solvent based products)

Process categories:

Use in batch and other process (syn- thesis) where opportunity for exposure arises[PROC4], Transfer of substance or mixture (charging and discharging) at nondedicated facilities[PROC8A], Transfer of substance or mixture (charging and discharging) at dedicated facilities[PROC8B], Application with rollers or brushes [PROC10]

Not recommended uses

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

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SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

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

Pictograms:
GHS05

Hazard Class and Category Code(s):
Met. Corr. 1, Skin Corr. 1, Eye Dam. 1

Hazard statement Code(s):
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.

The product can be corrosive to metals
Corrosive product: causes severe skin burns and eye damage.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

2.2. Label elements

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

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

Hazard statement Code(s):
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.



Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:

Prevention

P260 - Do not breathe vapours/spray.

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

Response

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

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

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Contains:

Disodium metasilicate, sodium hydroxide

Contains (Reg.EC 648/2004):

< 5% NTA (nitrilotriacetic acid) and salts ther, non-ionic surfactants

2.3. Other hazards

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

Do not ingest. Keep out of reach of children.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
1-Propoxy-2-Propanol	>= 10 < 20%	Flam. Liq. 3, H226; Eye Irrit. 2, H319		1569-01-3	216-372-4	01-2119474 443-37-XXX X
Alkyl polyglycol ether C12-18	>= 1 < 5%	Skin Irrit. 2, H315; Aquatic Acute 1, H400; Aquatic Chronic 3, H412		146340-16-1		
Disodium metasilicate	>= 1 < 3%	Met. Corr. 1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318; STOT SE 3, H335	014-010-00-8	6834-92-0	229-912-9	01-2119449 811-37-XXX X
Sodium hydroxide	>= 1 < 2%	Met. Corr. 1, H290;	011-002-00-6	1310-73-2	215-185-5	01-211945

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		Skin Corr. 1A, H314; Eye Dam. 1, H318				7892-27-XX XX
Trisodium nitrilotriacetate	>= 1 < 5%	Acute Tox. 4, H302; Eye Irrit. 2, H319; Carc. 2, H351	607-620-00-6	5064-31-3	225-768-6	01-2119519 239-36-XXX X

SECTION 4. First aid measures

4.1. Description of first aid measures

Self-protection for those who provide first aid. There must be eye wash stations and safety showers near workplaces In case of contact with the skin: immediately remove contaminated clothing and wash immediately with plenty of running water and possibly soap the areas of the body that have come into contact with the product SEE A DOCTOR IMMEDIATELY.

In case of contact with the eyes: rinse with water for an appropriate time and with the eyelids open, then immediately consult an ophthalmologist. Protect the uninjured eye. SEE A DOCTOR IMMEDIATELY.

In case of ingestion: DO NOT induce vomiting.

In case of inhalation: remove the injured person to fresh air and allow for breathing

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

Ingestion can cause chemical burns in the mouth and throat. Contact with skin can cause burns. In contact with eyes it causes very strong irritation, including redness and tearing.

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

Symptomatic treatment

SECTION 5. Firefighting measures

5.1. Extinguishing media

Recommended extinguishing media: Nebulized water, CO₂, foam, chemical powders depending on the materials involved in the fire.

Extinguishing media to avoid: Water jets. Use water jets only to cool the surfaces of containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

Do not inhale the gases produced by the explosion and combustion. Burning produces heavy smoke

5.3. Advice for firefighters

Use suitable respiratory equipment. Collect contaminated water used to extinguish the fire separately. Do not discharge it into the sewer system. If feasible from the point of view of safety, move the containers from the area of immediate danger without damage

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke
Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provide a sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spills with earth or sand.

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

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Rapidly recover the product, wear a mask and protective clothing (for specifications refer to section 8.2. SDS)
Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material or suck it.
Prevent it from entering the sewer system.

6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapors. Use localized ventilation system. Do not use empty containers

before they have been cleaned. Before transferring operations, make sure that there are no incompatible residual materials in the containers. Contaminated clothing must be replaced before entering the dining areas. At work do not eat or drink. Please also refer to paragraph 8 for recommended protective devices.

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.
Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

7.3. Specific end use(s)

Industrial Manufacturing:

Food industries: Handle with care. Store in a ventilated place away from heat sources (7-30 ° C) Keep the container tightly closed.

Manufacture of food products:

Food industries: Handle with care. Store in a ventilated place away from heat sources (7-30 ° C) Keep the container tightly closed.

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

Food industries: Handle with care. Store in a ventilated place away from heat sources (7-30 ° C) Keep the container tightly closed.

See the annex exposure scenario.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

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Related to contained substances:

Sodium hydroxide:

Limit value – Eight hours

(ppm)/(mg/m³)

Austria: x/2 inhalable aerosol

Belgium: x/2 (1)

Denmark: x/2

France: x/2

Hungary: x/2

Japan (JSOH): x/2(1)

Latvia: x/0,5

Poland: x/0,5

Romania: x/1

Spain: x/2

Sweden: x/1 (1)

Switzerland: x/2 inhalable aerosol (MAK)

USA – OSHA: x/2

Limit Value – Short Term

(ppm)/(mg/m³)

Australia: x/2(1)

Austria: x/4 inhalable aerosol

Canada - Ontario: x/2(1)

Canada – Québec: x/2(1)

Denmark: x/2

Finland: x/2(1)
Hungary: x/2
Ireland: x/2(1)
New Zealand: x/2(1)
People's Republic of China: x/2(1)
Poland: x/1
Romania: x/3(1)
Singapore: x/2
South Korea: x/2(1)
Sweden: x/2(1)(2)
Switzerland: x/2 inhalable aerosol (MAK)
USA – NIOSH: x/2(1)
United Kingdom: x/2

Remarks:

Australia: (1) Ceiling limit value
Canada – Ontario: (1) Ceiling limit value
Canada – Québec: (1) Ceiling limit value
Finland: (1) Ceiling limit value
Ireland: (1) 15 minutes reference period
Japan: (1) Occupational exposure limit ceiling: Reference value to the maximal exposure concentration of the substance during a working day
New Zealand: (1) Ceiling limit value
People's Republic of China: (1) Ceiling limit value
South Korea: (1) Ceiling limit value
Romania: (1) 15 minutes average value
Sweden: (1) Inhalable dust (2) Ceiling limit value
USA – NIOSH: (1) Ceiling limit value (15 min)
Argentina: CMP-C: 2 mg/m³
Czech Republic: PEL 1 mg/m³/ NPK-P 2 mg/m³
Italy: OEL: ACGIH - STEL: C 2.0 mg/m³; Tipo OEL: ACGIH - STEL: C2 mg/m³ - Note: URT, eye, and skin irrit
Estonia: short-term exposure limit (maximum chemical substance average allowable concentration in inhaled air - 15 minutes) 2 mg/m³ (Ceiling limit" means a maximum permissible continuous concentration of 15 minutes in the air for rapidly acting substances)
Norway: ceiling value (a moment value that indicates the maximum concentration of a chemical in the breathing zone that should not be exceeded) 2 mg/m³
Lithuania: NRD 2 mg/m³
Slovakia: NPEL 2 mg/m³
South Africa: Short Term OEL-CL 2 mg/m³

- Substance: 1-Propoxy-2-Propanol
DNEL

Systemic effects Long term Workers inhalation = 263 (mg/m³)
Systemic effects Long term Workers dermal = 82,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 38 (mg/m³)
Systemic effects Long term Consumers dermal = 36 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 11 (mg/kg bw/day)

PNEC

Sweet water = 0,1 (mg/l)
sediment Sweet water = 0,386 (mg/kg/sediment)
Sea water = 0,01 (mg/l)
sediment Sea water = 0,0386 (mg/kg/sediment)
intermittent emissions = 1 (mg/l)
STP = 4 (mg/l)
ground = 0,0185 (mg/kg ground)

- Substance: Disodium metasilicate
DNEL

Systemic effects Long term Workers inhalation = 6,22 (mg/m³)
Systemic effects Long term Workers dermal = 1,49 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 1,55 (mg/m³)
Systemic effects Long term Consumers dermal = 0,74 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,74 (mg/kg bw/day)
PNEC
Sweet water = 7,5 (mg/l)
Sea water = 1 (mg/l)
intermittent emissions = 7,5 (mg/l)
STP = 1000 (mg/l)

- Substance: Sodium hydroxide

DNEL

Systemic effects Short term Workers inhalation = 1 (mg/m³)
Systemic effects Short term Consumers inhalation = 1 (mg/m³)
Local effects Short term Workers inhalation = 1 (mg/m³)
Local effects Short term Consumers inhalation = 1 (mg/m³)

- Substance: Trisodium nitrilotriacetate

DNEL

Systemic effects Long term Workers inhalation = 3,5 (mg/m³)
Systemic effects Long term Consumers oral = 0,5 (mg/kg bw/day)
Systemic effects Short term Workers inhalation = 5,25 (mg/m³)
Systemic effects Short term Consumers inhalation = 1,75 (mg/m³)
Systemic effects Short term Consumers oral = 0,54 (mg/kg bw/day)
Local effects Long term Workers inhalation = 3,5
Local effects Short term Workers inhalation = 5,25 (mg/m³)
Local effects Short term Consumers inhalation = 1,75 (mg/m³)
PNEC
Sweet water = 0,93 (mg/l)
sediment Sweet water = 3,64 (mg/kg/sediment)
Sea water = 0,093 (mg/l)
sediment Sea water = 0,364 (mg/kg/sediment)
intermittent emissions = 0,915 (mg/l)
STP = 540 (mg/l)
ground = 0,182 (mg/kg ground)

8.2. Exposure controls

Appropriate engineering controls:

Industrial Manufacturing:

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

Manufacture of food products:

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

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

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

8.2.2 Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (EN 166)

(b) Skin protection

(i) Hand protection

When handling the product use chemical resistant protective gloves (EN374-1 / EN374-2 / EN374-3)

(ii) Other

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

(c) Respiratory protection

Not necessary for normal use.

In case of insufficient ventilation or in case of emergency intervention use mask with filters for Universal type ABECK (UNI EN 405) unless otherwise specified by the RSPP and / or by evaluations of environmental hygiene investigations. Not necessary if gaseous concentrations are kept below the exposure limit. Use protections respirators certified in

accordance with EU requirements (89/656 / EEC, 245/2016 EU) or equivalent if the respiratory risks are not can be avoided or sufficiently limited by collective protection or by measures, methods or work organization procedures

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

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

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	amber clear liquid	
Odour	characteristic of pine	
Odour threshold	not determined as considered not relevant for the characterization of the product	
pH	> 12 (20 ° C); 12,0 ± 0,5 (20 ° C sol.10%)	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flash point	not determined as considered not relevant for the characterization of the product	ASTM D92
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	1.05 ± 0.05 (20 ° C)	
Solubility	in water	

Physical and chemical properties	Value	Determination method
Water solubility	miscible in all proportions	
Partition coefficient: n-octanol/water	not determined as considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product	
Decomposition temperature	not determined as considered not relevant for the characterization of the product	
Viscosity	not determined as considered not relevant for the characterization of the product	
Explosive properties	not determined as considered not relevant for the characterization of the product	
Oxidising properties	not determined as considered not relevant for the characterization of the product	

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

Alkaline product

10.2. Chemical stability

No dangerous reactions if handled and stored according to the provisions

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Avoid breathing combustion fumes

10.5. Incompatible materials

Aluminum
Zinc
Copper alloys
Copper
Nickel
Acids

10.6. Hazardous decomposition products

Carbon oxides Nitrogen oxides

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 145.000,0 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: 1-Propoxy-2-Propanol: LD50 rat (mg / kg / 24h bw):> 2000

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

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

Alkyl polyglycol ether C12-18: Ingestion-rat LD50 (mg/kg/bw 24h): > 2000

Skin contact-LC50 rat/coniglio (mg/kg/bw24h): n.a.

Inhalation-rat LD50 (mg/l/4:00): n.a.

Disodium metasilicate: Ingestion - LD50 rat (mg / kg / 24h bw): 994.7 - 1 530

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw):> 5000

Inhalation - LD50 rat (mg / l / 4h) :> 2.06

Sodium hydroxide: Ingestion - LD50 rat (mg / kg / 24h bw): nd

Skin contact - LC50 rabbit (mg / kg / 24h bw): 1350

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

Trisodium nitrilotriacetate: LD50 rat (mg / kg / 24h bw): 1450

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): 10000

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

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

1-Propoxy-2-Propanol: Not corrosive

Alkyl polyglycol ether C12-18: Not corrosive

Disodium metasilicate: Corrosive

Sodium hydroxide: Corrosive

Trisodium nitrilotriacetate: Not corrosive

1-Propoxy-2-Propanol: Not irritating

Alkyl polyglycol ether C12-18: Irritating

Disodium metasilicate: Irritating

Sodium hydroxide: Irritating

Trisodium nitrilotriacetate: Not irritating

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

1-Propoxy-2-Propanol: Not corrosive

Alkyl polyglycol ether C12-18: Not corrosive

Disodium metasilicate: The material causes chemical burns. It can cause permanent damage if the eye is not irrigated immediately

Sodium hydroxide: Corrosive

Trisodium nitrilotriacetate: Not corrosive

1-Propoxy-2-Propanol: Irritating

Alkyl polyglycol ether C12-18: Not irritating

Disodium metasilicate: Irritating
Sodium hydroxide: Irritating
Trisodium nitrilotriacetate: Irritating
(d) respiratory or skin sensitization: 1-Propoxy-2-Propanol: Not sensitizing
Alkyl polyglycol ether C12-18: Not sensitizing
Disodium metasilicate: Non-sensitizing (LLNA)
Sodium hydroxide: Not sensitizing
Trisodium nitrilotriacetate: Not sensitizing
(e) germ cell mutagenicity: 1-Propoxy-2-Propanol: not mutagenic
Alkyl polyglycol ether C12-18: Not mutagenic on bacteria
Disodium metasilicate: Not mutagenic
Sodium hydroxide: NaOH did not induce mutagenicity in in vitro and in vivo studies (EU RAR, 2007; section 4.1.2.7, page 73).
Trisodium nitrilotriacetate: Not mutagenic
(f) carcinogenicity: 1-Propoxy-2-Propanol: not carcinogenic
Alkyl polyglycol ether C12-18: Unavailable
Disodium metasilicate: Not carcinogenic
Sodium hydroxide: Systemic carcinogenicity is not expected to occur as NaOH is not expected to be systemically available in the body under normal conditions of handling and use. Finally, adequate studies are not available to assess the risk on local carcinogenic effects.
Trisodium nitrilotriacetate: Carcinogenic suspect
(g) reproductive toxicity: 1-Propoxy-2-Propanol: not toxic for reproduction
Alkyl polyglycol ether C12-18: Unavailable
Disodium metasilicate: Effects on fertility: NOAEL (Rat) > 159 mg / kg bw / d. Developmental effects: NOAEL (Mouse) > 260 mg / kg bw / d.
Sodium hydroxide: NaOH is not expected to be systemically available in the body under normal conditions of handling and use and for this reason it can be said that the substance will neither reach the fetus nor reach the male and female reproductive organs (EU RAR Sodium Hydroxide (2007), section 4.1.2.8, page 73). It can be concluded that a specific study is not required to determine reproductive toxicity.
Trisodium nitrilotriacetate: Not toxic for reproduction
(h) specific target organ toxicity (STOT) single exposure: 1-Propoxy-2-Propanol: not available
Alkyl polyglycol ether C12-18: Unavailable
Disodium metasilicate: Irritates respiratory systems
Sodium hydroxide: The substance can be absorbed into the body by inhalation of its aerosol, by ingestion and by contact with the skin causing corrosion
Trisodium nitrilotriacetate: No specific target organ toxicity is expected after a single exposure
(i) specific target organ toxicity (STOT) repeated exposure: 1-Propoxy-2-Propanol: not available
Alkyl polyglycol ether C12-18: No adverse effects were observed in animal studies after repeated oral exposure
Disodium metasilicate: NOAEL oral (rat): 227 - 237 mg / kg bw / day oral
NOAEL oral (mouse): 260 - 284 mg / kg bw / day oral
LOAEL oral (mouse): 716 - 892 mg / kg bw / day
Sodium hydroxide: The introductory sections of Annexes VII-X indicate a specific adaptation to standard information requirements as in vivo testing should be avoided with corrosive substances at concentration / dose levels causing corrosivity. However, NaOH is not expected to be systemically available in the body under normal conditions of handling and use and therefore no systemic effects of NaOH are expected after repeated exposure (EU RAR sodium hydroxide (2007); section 4.1.3.1.4, page 76).
Trisodium nitrilotriacetate: No specific toxicity for target organs is expected after repeated exposure.
(j) aspiration hazard: 1-Propoxy-2-Propanol: not available
Alkyl polyglycol ether C12-18: Aspiration hazard is not expected
Disodium metasilicate: Not available
Sodium hydroxide: Not available
Trisodium nitrilotriacetate: Not available

12.1. Toxicity

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Related to contained substances:

1-Propoxy-2-Propanol:

Acute toxicity - fish LC50 (mg / l / 96h): > 100

Acute toxicity - crustaceans EC50 (mg / l / 48h): > 100

Acute toxicity algae CE50 (mg / l / 72-96h): 1466

Acute toxicity - microorganisms (mg / l / 16h): 3800

Alkyl polyglycol ether C12-18:

Acute toxicity - LC50 fish (mg / l / 48h): > 0.1 - 1

Acute toxicity - crustaceans EC50 (mg / l / 24h): > 0.1 - 1

Acute toxicity algae ErC50 (mg / l / 72-96h): > 0,1 - 1

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

Chronic toxicity - crustaceans NOEC (mg / l): > 0.1 - 1 (Daphnia magna - OECD - guideline 202 part 2)

Toxicity chronic NOEC algae (mg / l): nd

Disodium metasilicate:

Acute toxicity on fish LC50 (96 hours): 210 (Brachydanio rerio) - 2 320 (Gambusia affinis) Acute toxicity on invertebrates: EC50 (48 hours): 1700 mg / l (Daphnia magna)

Acute toxicity on Algae / Cyanobacteria: EC50 (72 h, biomass): 207 mg / L (Scenedesmus subspicatus), EC50 (72 hours, Growth inhibition): 345.4 mg / L

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

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

Chronic toxicity NOEC algae (mg / l): nd

Toxicity on microorganisms: EC50 (3 h) 100 mg / L - EC0 (30 min) 1 g / L

C(E)L50 (mg/l) = 1108

Sodium hydroxide:

Acute toxicity - fish LC50 (mg / l / 96h): 45

Acute toxicity - crustaceans EC50 (mg / l / 48h): 40

Acute toxicity to algae ErC50 (mg / l / 72-96h): n.d

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

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

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

Available data indicate that NaOH concentrations of approximately 20 to 40 mg / L may be acutely toxic to fish and invertebrates (single species test). There is a lack of data on the increase in pH due to the addition of these quantities of NaOH in the test waters used. In waters with relatively low buffering capacity, NaOH concentrations of 20-40 mg / L may lead to an increase in pH with one or more pH units (EU RAR, 2007; section 3.2.1.1.3, page 30).

The OECD SIDS (2002) assigned a low reliability code ("invalid" or "not assignable") to all available tests, since in general the tests were not conducted according to current guidelines (EU RAR, 2007 ; section 3.2. 1.1.4, page 30). Furthermore, in many test reports there were no data on pH, buffer capacity and / or composition of the test medium, although this is essential information for NaOH toxicity testing. This is the most important reason why most of the tests were considered "invalid". Despite this lack of valid data, it is not necessary to perform further aquatic toxicity tests with NaOH, as all available tests have resulted in a rather small range of toxicity values (acute toxicity test: 20 to 450 mg / L; test chronic toxicity: > or = 25 mg / L) and there are sufficient data on the pH ranges tolerated by the main taxonomic groups.

Furthermore, a generic PNEC cannot be derived from the single species toxicity data for NaOH, as the pH of natural waters and the buffering capacity of natural waters show considerable differences and aquatic organisms / ecosystems are adapted to these specific natural conditions, with resulting in different pH optima and tolerated pH ranges (EU RAR, 2007; section 3.2.1.1.4, page 30). According to the OECD SIDS (2002), a lot of information is available on the relationship between pH and ecosystem structure, and natural changes in the pH of aquatic ecosystems have also been quantified and widely reported in ecological publications and manuals.

C(E)L50 (mg/l) = 45

Trisodium nitrilotriacetate:

Acute toxicity - LC50 (mg / l / 96h): 98

Acute toxicity - EC50 crust (mg / l / 48h): 560-1000

Acute algae ErC50 (mg / l / 72-96h): > 91.5

C(E)L50 (mg/l) = 98

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

12.2. Persistence and degradability

=====

Related to contained substances:

1-Propoxy-2-Propanol:

Easily biodegradable 91.5%: 28 days

Alkyl polyglycol ether C12-18:

Easily biodegradable

Disodium metasilicate:

Not applicable

Sodium hydroxide:

according to REACH regulation, it is not necessary to conduct the study if the substance is inorganic (Annex VII, adaptation column 2).

Trisodium nitrilotriacetate:

Easily biodegradable

12.3. Bioaccumulative potential

=====

Related to contained substances:

1-Propoxy-2-Propanol:

Bioaccumulation BFC is not expected: <100 log Pow: 0.621

Alkyl polyglycol ether C12-18:

Not bioaccumulative

Disodium metasilicate:

Toxicokinetic data on vertebrates revealed a low potential for bioaccumulation. The soluble ingested silicates are excreted through the urine and to a lesser extent through the faeces. Markedly increased rapid urinary silica excretion was observed when soluble sodium silicates were administered to rats (Benke & Osborn 1979), dogs (King et al. 1933), cats (King & McGeorge 1938) and guinea pigs (Sauer et al 1959). The half-life of urinary silicon excretion after administration of sodium silicate in rats via the gastric cannula was 24 hours (Benke & Osborn 1979).

Sodium hydroxide:

According to REACH, it is not necessary to conduct the study if the substance has a low bioaccumulation potential (Annex IX, adaptation column 2). Considering its high water solubility, NaOH should not bioconcentrate in organisms. Log Pow is not applicable for an inorganic compound that dissociates (EU RAR 2007, section 3.1.1 page 19 and section 3.1.3.4, page 26). Furthermore, sodium is an element present in nature prevalent in the environment and to which organisms are regularly exposed, for which they have a certain ability to regulate the concentration of the organism.

Trisodium nitrilotriacetate:

Not bioaccumulable

12.4. Mobility in soil

=====

Related to contained substances:

1-Propoxy-2-Propanol:

The product is soluble in water

Alkyl polyglycol ether C12-18:

Possible absorption in the solid phase of the soil

Disodium metasilicate:

Due to a strong dependence on pH and concentration which leads to a dynamic polymerisation-depolymerisation equilibrium with speciation into a variety of mono-, oligo-, and polymeric anions and amorphous silica, calculations on the distribution in various environmental compartments are not feasible (HERA 2005).

Dissolved silica from commercial soluble silicates is indistinguishable from natural dissolved silica. Of the elemental composition of the earth's crust, SiO₂ represents about 59%. Similar percentages are obtained for many sediments and soils (Jackson 1964 as cited in HERA 2005). Silica is found in European rivers in mean concentrations of 7.5 mg SiO₂/L (Jorgensen et al. 1991). Thus, silica is the second most abundant element on earth. Compounds of silicon and oxygen are ubiquitous in the environment; they are present in inorganic matter, like minerals and soils as well as in organic matter, like plants, animals and man. By weathering of soil, rocks and sediments and by atmospheric deposition, silica is released into surface and ground waters from where it may be removed by precipitation and sedimentation or taken up by living organisms, especially diatoms. Dead sedimenting diatoms also contribute significantly to sediment silica (diatomaceous earth). Silica is found in all natural waters with an average concentration of 10-20 mg SiO₂/L (HERA 2005).

Due to the low vapour pressure, volatilisation is not expected.

Sodium hydroxide:

According to the REACH regulation, it is not necessary to conduct an adsorption / desorption study if, based on the physicochemical properties, the substance can be expected to have a low adsorption potential (Annex VIII, adaptation column 2).

Considering its high water solubility, NaOH should not bioconcentrate in organisms. The high water solubility and low vapor pressure indicate that NaOH will be found primarily in the aquatic environment.

The 73% aqueous NaOH solution at room temperature is a highly viscous gelatinous material and without additional dilution (precipitation), it is not expected to infiltrate the soil to any significant extent. The 50% aqueous NaOH solution is liquid and is expected to infiltrate the soil to a measurable extent. As a dilution of NaOH increases, increases its speed of movement through the ground. During movement through the ground, some ion exchange will occur.

Also, part of the hydroxide can remain in the aqueous phase and will move down through the soil in the direction of groundwater flow (EU RAR 2007, section 3.1.3, page 24).

Trisodium nitrilotriacetate:

No adsorption is required

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Other adverse effects

No adverse effects

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

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

SECTION 13. Disposal considerations

13.1. Waste treatment methods

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

Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information

14.1. UN number

ADR/RID/IMDG/ICAO-IATA: 3266

If subject to the following characteristics is ADR exempt:

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

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



14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO INORGANICO CORROSIVO, BASICO, N.A.S. (Disodio metasilicato e sodio idrossido in miscela)

ADR/RID/IMDG: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Disodium metasilicate and Sodium hydroxide in mixture))

ICAO-IATA: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Disodium metasilicate and Sodium hydroxide in mixture))

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 8

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

ADR: Tunnel restriction code : E

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

IMDG - EmS : F-A, S-B

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: II

14.5. Environmental hazards

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

IMDG: Marine polluting agent : No

14.6. Special precautions for user

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

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

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

Restrictions relating to the product or contained substances (All. XVII Reg. EC 1907/2006): not applicable
Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC
Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC
Reg. EC 648/04: see 2.2
Reg. (EU) n. 1169/2011: see 2.2
Reg (UE) 528/2012: see.to 2.2

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

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 4.1. Description of first aid measures, 4.2. Most important symptoms and effects, both acute and delayed, 4.3. Indication of any immediate medical attention and special treatment needed, 5.1. Extinguishing media, 5.2. Special hazards arising from the substance or mixture, 5.3. Advice for firefighters, 6.2. Environmental precautions, 6.3. Methods and material for containment and cleaning up, 6.4. Reference to other sections, 7.1. Precautions for safe handling, 7.2. Conditions for safe storage, including any incompatibilities, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 10.1. Reactivity, 10.2. Chemical stability, 10.3. Possibility of hazardous reactions, 10.4. Conditions to avoid, 10.5. Incompatible materials, 10.6. Hazardous decomposition products, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in

soil, 12.5. Results of PBT and vPvB assessment, 12.6. Other adverse effects, 13.1. Waste treatment methods,

Description of hazard statements set out in paragraph 3

H226 = Flammable liquid and vapour.
H319 = Causes serious eye irritation.
H315 = Causes skin irritation.
H400 = Very toxic to aquatic life.
H412 = Harmful to aquatic life with long lasting effects.
H290 = May be corrosive to metals.
H314 = Causes severe skin burns and eye damage.
H318 = Causes serious eye damage.
H335 = May cause respiratory irritation.
H302 = Harmful if swallowed.
H351 = Suspected of causing cancer .

Classification based on data of all mixture components

Main normative references:

Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.
Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.
Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.
Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)
Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.
Regulation (UE) 528/2012 (Biocides) et seq.

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

Physical hazards: On the basis of experimental data
H314 Skin. Corr. 1A: On the basis of experimental data
Other hazards: Calculation Method

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

n.a.: not applicable

n.d.: not available

ADR: Accord européen relative au transport International des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimati

BFC: BioconCentration Factor

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

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

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50

COD: Chemical Oxygen Demand

DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Enviroment Release Classes

EU/UE: European Union

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient

NOEC: No Observed Effect Concentration

OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic
PC: Product Categories
PNEC: Predicted No Effect Concentration
PROC: Process Categories
RID: Règlement concernant le transport International ferroviaire des marchandises dangereuses (Regulations concerning International rail transport of dangerous goods)
STOT: Target Organ Systemic Toxicity
STOT (RE): Repeated Exposure
STOT (SE): Single Exposure
STP: Sewage Treatment Plants
SU: Sector of Use
SVCH: Substance of Very High Concern
TLV: Threshold Limit Value
vPvB: Very Persistent Very Bioaccumulative

References and Sources:

- ECHA Registered Substances:
<https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>
- SDS supplier
- GESTIS DNEL Database: <http://www.dguv.de/ifa/gestis/gestis-dnel-datenbank/index-2.jsp>
- GESTIS International Limit Value: <http://limitvalue.ifa.dguv.de>

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

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

Changes to the previous edition: sec. 1,2,4,5,6,7,8,10,11,12,13- exposure scenarios. Working instrucion tablea attached

SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_4_2***Version 1.1, August 2018****Industrial uses; Automated task; Semi-automated task; Dedicated equipment***

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

General description of the process covered

The SUMI applies to industrial uses where products are used in closed process where opportunity for exposure arises. This Safe Use Information is based on the **AISE_SWED_IS_4_2**.

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.

If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

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

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SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_8b_1***Version 1.1, August 2018****Transfer and dilution of concentrated product by using dedicated dosing system***

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

General description of the process covered

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

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

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

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SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_10_1_G***Version 1.1, August 2018****Brushing; Automated task***

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

General description of the process covered

This SUMI applies to industrial uses where the product is used in an automated brushing task. This Safe Use Information is based on the **AISE_SWED_IS_10_1**.

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

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If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

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

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SUMI**Safe Use of Mixtures Information****AISE_SUMI_PW_4_1***Version 1.1, August 2018****Professional uses; Semi-closed system***

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

General description of the process covered

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

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.

If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

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

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SUMI**Safe Use of Mixtures Information****AISE_SUMI_PW_8a_1_G***Version 1.1, August 2018****Transfer of product to a container (bottle/bucket/machine)***

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

General description of the process covered

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

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

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

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SUMI**Safe Use of Mixtures Information****AISE_SUMI_PW_10_2_G***Version 1.1, August 2018****Professional uses; Brushing after trigger spraying or brushing with tools***

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

General description of the process covered

This SUMI applies to professional uses where the product is brushed on a surface, with limited exposure to the hands, either after trigger spraying or through the use of tools such as a mop. This Safe Use Information is based on the **AISE_SWED_PW_10_2**.

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.

If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

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

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WORKING ISTRUCTION TABLE



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

Attached to MSDS rel#6 del 12/21/20

Use description	Use in batch and other process (synthesis) where opportunity for exposure arises [PROC4]; Transfer of substance or mixture (charging and discharging) at dedicated facilities [PROC8b]; Application with rollers or brushes [PROC10];
Product name	PAV
Classification of the product (100%)	H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. H318 - Causes serious eye damage.
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (10%) the product is classified: H314 - Causes severe skin burns and eye damage. H318 - Causes serious eye damage.
Handling of the product (100%)	Avoid contact and inhalation of vapors Wear protective gloves/clothing and eye/face protection. At work do not eat or drink.
Handling of the diluted product	Avoid contact and inhalation of vapors Wear protective gloves/clothing and eye/face protection. At work do not eat or drink.
DPI required concentrated product (racking, concentrated use, spillage...)	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).
Diluted product	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).

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