

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

### 1.1. Product identifier

Product name : MEMBRAN  
Product code: refer to sales department

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

Alkaline cleaning

Sectors of use:

Industrial Manufacturing[SU3], Manufacture of food products[SU4]

Product category:

Washing and Cleaning Products (including solvent based products)

Process categories:

Use in batch and other process (syn- thesis) where opportunity for exposure arises[PROC4], Transfer of substance or mixture (charging and discharging) at dedicated facilities[PROC8B], Treatment of articles by dipping and pouring [PROC13]

Not recommended uses

Do not use for purposes other than those listed

### 1.3. Details of the supplier of the safety data sheet

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#### 1.4. Emergency telephone number

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AEB USA  
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AEB AFRICA (PTY) LTD  
Switchboard: +27 215512700 (GMT +1; Language: English, Afrikaans)

AEB OCEANIA PTY LTD  
Switchboard: +61 1300 704 971 (GMT +9; Language: English)

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

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

Pictograms:  
GHS05, GHS07

Hazard Class and Category Code(s):  
Met. Corr. 1, Acute Tox. 4, Skin Corr. 1, Eye Dam. 1

Hazard statement Code(s):  
H290 - May be corrosive to metals.  
H302 - Harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.

The product can be corrosive to metals  
Harmful product: do not ingest  
Corrosive product: causes severe skin burns and eye damage.  
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

### 2.2. Label elements

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

Pictogram, Signal Word Code(s):  
GHS05, GHS07 - Danger



**Hazard statement Code(s):**

H290 - May be corrosive to metals.  
H302 - Harmful if swallowed.  
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:**

Potassium hydroxide

**Contains (Reg.EC 648/2004):**

< 5% phosphonates, polycarboxylates

**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
Potassium hydroxide	>= 25 < 50%	Met. Corr. 1, H290; Acute Tox. 4, H302; Skin Corr. 1A, H314 Limits: Skin Corr. 1A, H314 %C >=5; Skin Corr. 1B, H314 2<= %C <5; Skin Irrit. 2,	019-002-00-8	1310-58-3	215-181-3	01-2119487 136-33-XXX X

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
		H315 0,5<= %C <2; Eye Irrit. 2, H319 0,5<= %C <2;				
Polycarboxylate substance for which there are Community workplace exposure limits	>= 3 < 5%					

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

#### Direct contact with skin (of the pure product):

Take off immediately contaminated clothing.  
In case of contact with skin, wash immediately with water.  
Immediately consult a physician.

#### Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately  
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

#### Ingestion:

The product is harmful and can cause irreversible damages even following a single exposure if swallowed.  
Drink water with egg white; do not give bicarbonate.  
Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

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

Swallowing can cause chemical burns in the mouth and throat as well as nausea and choking. In contact with skin it may cause burns. Contact with eyes causes very severe irritation, including redness and tear.

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

Immediately call a POISON CENTER or a doctor.

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### Suggested extinguishing media:

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.

#### Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

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

No data available.

### **5.3. Advice for firefighters**

Use protection for the breathing apparatus

Safety helmet and full protective clothing.

The water spray can be used to protect the people involved in the extinction.

You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas.

Keep containers cool with water spray

## **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 and inhalation of vapors  
Wear protective gloves/clothing and eye/face protection..  
In residential areas do not use on large surfaces.  
At work do not eat or drink.  
Do not eat, drink or smoke when using this product.  
See also paragraph 8 below.

### 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:  
Handle with extreme caution.  
Store in a well ventilated place away from heat sources. (7-30°C)

Manufacture of food products:  
Handle with care.  
Store in a clean, dry, ventilated area away from heat and direct sunlight.  
Keep container tightly closed. (7-30°C)

See the annex exposure scenario.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

=====  
Related to contained substances:  
Potassium hydroxide:  
ACGIH - C: 2 mg/m<sup>3</sup>

Limit value – Eight hours  
(ppm)/(mg/m<sup>3</sup>)  
Austria: x/2 inhalable aerosol  
Denmark: x/2  
Hungary: x/2  
Japan (JSOH): x/2(1)  
Poland: x/0,5  
Spain: x/2  
Sweden: x/1  
Switzerland: x/2 inhalable aerosol

Limit Value – Short Term  
(ppm)/(mg/m<sup>3</sup>)  
Australia: x/2(1)  
Belgium: x/2(1)(2)  
Canada - Ontario: x/2(1)  
Canada – Québec: x/2(1)  
Denmark: x/2  
Finland: x/2(1)  
France: x/2

Hungary: x/2  
Ireland: x/2(1)  
New Zealand: x/2(1)  
People's Republic of China: x/2(1)  
Poland: x/1  
Singapore: x/2  
South Korea: x/2(1)  
Sweden: x/2(1)  
USA – NIOSH: x/2(1)  
United Kingdom: x/2

**Remarks:**

Australia: (1) Ceiling limit value  
Belgium: (1) Additional indication "M" means that irritation occurs when the exposure exceeds the limit value or there is a risk of acute poisoning. The work process must be designed in such a way that the exposure never exceeds the limit value. For evaluation, the sampled period should be as short as possible. However, the sampled period shall be long enough to perform a reliable measurement. The measured result shall be related to the considered period.  
Canada – Ontario: (1) Ceiling limit value  
Canada – Québec: (1) Ceiling limit value  
Finland: (1) Ceiling limit value  
Ireland: (1) 15 minutes reference period  
Japan (JSOH): (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  
Sweden: (1) Inhalable dust (2) Ceiling limit value  
USA – NIOSH: (1) Ceiling limit value (15 min)

Argentina: CMP-C: 2 mg/m<sup>3</sup>  
Czech Republic: PEL 1 mg/m<sup>3</sup>/ NPK-P 2 mg/m<sup>3</sup>  
Italy: ACGIH C2 mg/m<sup>3</sup> - Note: URT, eye, and skin irr  
Estonia: THRESHOLD (average concentration of the chemical inhaled in the air during a working day or a working week) 2 mg/m<sup>3</sup>  
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/m<sup>3</sup>  
South Africa: Short Term OEL-CL mg/m<sup>3</sup> 2

Polycarboxylate:  
TWA respirable dust fraction (DOW IHG) : 0,5 mg/m<sup>3</sup>

- Substance: Potassium hydroxide  
DNEL  
Local effects Long term Workers inhalation = 1  
Local effects Long term Consumers inhalation = 1 (mg/m<sup>3</sup>)

## 8.2. Exposure controls

Appropriate engineering controls:  
Industrial Manufacturing:  
No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

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

8.2.2 Individual protection measures:

(a) Eye / face protection

Wear protective goggles (EN 166).

(b) Skin protection

(i) Hand protection

When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3).

(ii) Other

During working operation wear protective clothing (generic workwear/antacid, safety shoes or other protective equipment) according to the instructions of the employer

(c) Respiratory protection

Not needed for normal use

In case of insufficient ventilation or emergency, use mask with gas filters and inorganic vapors - Grey , Class 3 , B(EN 405) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic. 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, 245/2016 UE), 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

(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	clear liquid	
Colour	colorless	
Odour	not determined as considered not relevant for the characterization of the product	
Odour threshold	not determined as considered not relevant for the characterization of the product	
pH	>12.0 (Sol.1%, 20°C); >12.0 (100%, 20°C)	
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	
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	

Physical and chemical properties	Value	Determination method
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	1,35 ± 0,05 (20 °C)	
Solubility	in water	
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

Base

### 10.2. Chemical stability

In contact with air it produces carbonates. Stable under recommended storage and handling conditions.

### 10.3. Possibility of hazardous reactions

It reacts with aluminum, tin, zinc and their alloys, bronze, lead, etc. emitting hydrogen. Very exothermic reaction with strong acids.

#### 10.4. Conditions to avoid

Avoid prolonged contact with air, storage at temp. below 7 ° C and the provisions of 10.3

#### 10.5. Incompatible materials

It can generate flammable gases in contact with halogenated organic substances, elementary metals.

#### 10.6. Hazardous decomposition products

It does not decompose when used for its intended uses.

### SECTION 11. Toxicological information

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

ATE(mix) oral = 1.154,8 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

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

Potassium hydroxide: Ingestion - LD50 rat (mg / kg / 24h bw): 333 - 388

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

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

Polycarboxylate: Ingestion - LD50 rat (mg / kg / 24h bw):> 5000

Contact with skin - LD50 rabbit (mg / kg / 24h bw):> 5000

Inhalation - LC50 rat (mg / l / 4h): nd

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

Potassium hydroxide: Corrosive

Polycarboxylate: Non-corrosive

Potassium hydroxide: Irritating

Polycarboxylate: Slightly 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.

Potassium hydroxide: Corrosive

Polycarboxylate: Non-corrosive

Potassium hydroxide: Irritating

Polycarboxylate: Slightly irritating

(d) respiratory or skin sensitisation: Potassium hydroxide: Not sensitizing

Polycarboxylate: Non-sensitizing

(e) germ cell mutagenicity: Potassium hydroxide: Not mutagenic

Polycarboxylate: Non-mutagenic

(f) carcinogenicity: Potassium hydroxide: Not available

Polycarboxylate: Non-carcinogenic

(g) reproductive toxicity: Potassium hydroxide: Not available

Polycarboxylate: Not available

(h) specific target organ toxicity (STOT) single exposure: Potassium hydroxide: Not available

Polycarboxylate: Not available  
(i) specific target organ toxicity (STOT) repeated exposure Potassium hydroxide: Not available  
Polycarboxylate: Not available  
(j) aspiration hazard: Potassium hydroxide: Not available  
Polycarboxylate: Not available

### 11.2. Information on other hazards

No data available.

## SECTION 12. Ecological information

### 12.1. Toxicity

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Related to contained substances:

Potassium hydroxide:

Acute toxicity - fish LC50 (mg / l / 96h): 50 - 165

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

Acute algae toxicity ErC50 (mg / l / 72-96h): nd

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

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

Chronic toxicity algae NOEC (mg / l): nd

Potassium hydroxide is a strongly alkaline substance that dissociates completely in water to K + and OH- (OIDD SIDS potassium hydroxide, 2002). Therefore, the possible effective effect would result from the pH effect. However, the pH will remain between the expected environmental ranges

Polycarboxylate:

LC50, Oncorhynchus mykiss (Rainbow trout), 96 h, 700 mg / l

EC50, Daphnia magna (Water flea), 48 h, > 1 000 mg / l

EC50, Marine algae (Skeletonema costatum), 72 h, Speed of growth, 480 mg / l

For similar material (s)

(NOEC), Daphnia magna (Large water flea), Continuous flow test, 21 d, number of offspring, 12 mg / l

For similar material (s)

MATC (Maximum Acceptable Toxicant Level), Daphnia magna (Large water flea), Continuous flow test, 21 d, number of descendants, 17 mg / l

Information on a similar product: CL50, Eisenia fetida (earthworms), 14 days, > 1 000 mg / kg

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

### 12.2. Persistence and degradability

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Related to contained substances:

Potassium hydroxide:

Potassium hydroxide is not classified for the environmental compartment based on its dissociation in the environment, lack of bioaccumulation and lack of adsorption of particles or surfaces.

Polycarboxylate:

The material is expected to biodegrade very slowly (in the environment). It does not pass the OECD / EEC tests for rapid biodegradability.

### 12.3. Bioaccumulative potential

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Related to contained substances:

Potassium hydroxide:

Potassium hydroxide is a strong alkaline substance that completely dissociates in water to K + and OH-. Considering its high solubility in water, potassium hydroxide is not expected to be bioconcentric in organisms. Log Pow is not applicable for an inorganic compound that dissociates.

Polycarboxylate:

Not available

### 12.4. Mobility in soil

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Related to contained substances:

Potassium hydroxide:

According to the REACH regulation, it is not necessary to conduct the study if, based on the properties of the physical, the substance can be expected to have a low adsorption potential (Annex VIII, adaptation of column 2). Potassium hydroxide is very soluble in water and completely dissociates into K + and OH-. If emitted in surface waters, the absorption of particles and sediments will be negligible

Polycarboxylate:

Not available

### 12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

### 12.6. Endocrine disrupting properties

No data available.

### 12.7. Other adverse effects

No adverse effects

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

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

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

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

Recover if possible. Operate according to local or national regulations

## SECTION 14. Transport information

**14.1. UN number or ID 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. (Idrossido di potassio in miscela)

ADR/RID/IMDG: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide in mixture)

ICAO-IATA: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium 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. Maritime transport in bulk according to IMO instruments**

Transport in bulk is not foreseen

### 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: 2.2. Label elements

Description of hazard statements set out in paragraph 3

H290 = May be corrosive to metals.  
H302 = Harmful if swallowed.  
H314 = Causes severe skin burns and eye damage.

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 / Calculation Method  
Other hazards: Calculation Method

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

n.a.: not applicable

n.d.: not available

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

ATE: Acute Toxicity Estimat

BFC: BioconCentration Factor

BOD: Biochemical Oxigen Demand

CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

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

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50

COD: Chemical Oxygen Demand

DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Environment Release Classes

EU/UE: European Union

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient

NOEC: No Observed Effect Concentration

OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

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

STOT: Target Organ Systemic Toxicity

STOT (RE): Repeated Exposure

STOT (SE): Single Exposure

STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

vPvB: Very Persistent Very Bioaccumulative

References and Sources:

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

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

Changes to the previous edition: label elements, exposure scenario updating, updating to reg.UE 878/2020

**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**

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

**Risk Management Measures**

<b>Measures related to personal protective equipment (PPE), hygiene and health evaluation</b>	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.
<b>Environmental measures</b>	Prevent that undiluted product reaches surface waters. <b>If appropriate AISE SPERC 8a.1.a.v2 may apply:</b> wide dispersive use resulting in release to municipal sewage treatment plant.

**Additional good practice advice**

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

**Additional information depending on product composition**

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

**Disclaimer**

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

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

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

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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**

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

**Risk Management Measures**

<b>Measures related to personal protective equipment (PPE), hygiene and health evaluation</b>	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.
<b>Environmental measures</b>	Prevent that undiluted product reaches surface waters.
	<b>If appropriate AISE SPERC 8a.1.a.v2 may apply:</b> wide dispersive use resulting in release to municipal sewage treatment plant.

### Additional good practice advice

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

### Additional information depending on product composition

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

### Disclaimer

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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\_13\_3\_G***Version 1.1, August 2018****Industrial uses; Treatment of articles by dipping or pouring***

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

**General description of the process covered**

This SUMI applies to industrial uses where articles are treated by dipping or pouring. This Safe Use Information is based on the **AISE\_SWED\_IS\_13\_3**.

**Operational Conditions**

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

**Risk Management Measures**

<b>Measures related to personal protective equipment (PPE), hygiene and health evaluation</b>	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.
<b>Environmental measures</b>	Prevent that undiluted product reaches surface waters.
	<b>If appropriate AISE SPERC 8a.1.a.v2 may apply:</b> wide dispersive use resulting in release to municipal sewage treatment plant.

**Additional good practice advice**

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

**Additional information depending on product composition**

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

**Disclaimer**

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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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# 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#7 del 07/12/21

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]; Treatment of articles by dipping and pouring [PROC13]
Product name	<b>MEMBRAN</b>
Classification of the product (100%)	H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. H318 - Causes serious eye damage. H302 - Harmful if swallowed.
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (1%) 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).

<p>In case of emergency (accidents involving exposure to the product)</p>	<p>Immediately inform the customer.  Immediately inform the employer.  Contact Poisons Centres tel. number in 1.4 section of the MSDS</p>
<p>Accidental release large quantities measures: concentrated product</p>	<p>Wear gloves,mask, glasses and protective clothing (for specifications refer to section 8.2 . SDS). Possibly absorb it with inert materia or sucked it.  After wiping up, wash with water the area and materials involved</p>
<p>Diluted product</p>	<p>Wear gloves, glasses and protective clothing (for specifications refer to section 8.2 . SDS). Possibly absorb it with inert materia or sucked it.  After wiping up, wash with water the area and materials involved</p>
<p>Storage of the product</p>	<p>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.</p>
<p>In case of accidents, emergency or fire</p>	<p>Immediately inform the customer.  Follow company emergency instruction.</p>