

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

1.1. Product identifier

Product name : REMOX
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], Brushing / scrubbing after spray application (trigger) or brushing / scrubbing with tools [PROC10]

Not recommended uses

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

AEB SpA - Via Vittorio Arici 104 S.Polo - 25134 Brescia (BS) Italy
Tel. +39.030.2307.1 Fax +39.030.2307281
E-mail: info@aeb-group.com - Internet: www.aeb-group.com
E-mail tecnico competente/technical dept.: sds@aeb-group.com

AEB USA
111 N Cluff Avenue
Lodi CA 95240 (USA)
Tel: +1 2096258139 Fax: +1 2092248953
Email: info@aebusa.com - Internet: www.aeb-group.com

AEB AFRICA (PTY) LTD
18 Track Crescent, Cor. Station Road
Montague Gardens 7441
Cape Town (South Africa)
Tel.: +27 215512700 - Fax: +27 (0) 215511919
Email: info@aeb.co.za - Internet: www.aeb-group.com

AEB OCEANIA PTY LTD
178A Wakaden Street
Griffith NSW 2680
T: 1300 704 971
Email: aeboceania@aeb-group.com - Internet: www.aeb-group.com

Produced by
AEB SpA
Via Vittorio Arici 104 S. Polo

25134 Brescia

1.4. Emergency telephone number

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

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

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

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

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

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

Pictograms:
GHS05, GHS07

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

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 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	>= 10 < 25%	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, H315 0,5<= %C <2; Eye Irrit. 2, H319 0,5<= %C <2; ATE oral = 333,0 mg/kg	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
Polycarboxylate substance for which there are Community workplace exposure limits	>= 1 < 2,5%					

SECTION 4. First aid measures

4.1. Description of first aid measures

In case of ingestion DO NOT induce vomiting, contact IMMEDIATELY a POISON CENTER or a doctor.

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

Ingestion may cause chemical burns in the mouth and throat as well as nausea and suffocation.

Skin contact may cause burns.

Contact with eyes may cause intense irritation, including redness and tearing.

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, CO₂, 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

6.1.1 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.

Handle the product after consulting all other sections of this safety data sheet.

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/m³

Limit value – Eight hours

(ppm)/(mg/m³)

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/m³)

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/m³

Czech Republic: PEL 1 mg/m³/ NPK-P 2 mg/m³

Italy: ACGIH C2 mg/m³ - 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/m³

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

South Africa: Short Term OEL-CL mg/m³ 2

Polycarboxylate:

TWA respirable dust fraction (DOW IHG) : 0,5 mg/m³

- Substance: Potassium hydroxide

DNEL

Local effects Long term Workers inhalation = 1 (mg/m³)

Local effects Long term Consumers inhalation = 1 (mg/m³)

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
Physical state	Clear liquid	
Colour	Colorless	
Odour	not determined as deemed not relevant to the characterization of the product	
Odour threshold	not determined as deemed not relevant to the characterization of the product	
Melting point/freezing point	not determined as deemed not relevant to the characterization of the product	
Boiling point or initial boiling point and boiling range	not determined as deemed not relevant to the characterization of the product	
Flammability	not determined as deemed not relevant to the characterization of the product	
Lower and upper explosion limit	not determined as deemed not relevant to the characterization of the product	
Flash point	not determined as deemed not relevant to the characterization of the product	
Auto-ignition temperature	not determined as deemed not relevant to the characterization of the product	
Decomposition temperature	not determined as deemed not relevant to the characterization of the product	
pH	> 12 (20°C; sol. 8%); > 12 (20°C; 100%)	
Kinematic viscosity	not determined as deemed not relevant to the characterization of the product	
Solubility	in water	
Water solubility	miscible in all proportions	
Partition coefficient n-octanol/water (log value)	not determined as deemed not relevant to the characterization of the product	
Vapour pressure	not determined as deemed not relevant to the characterization of the product	

Physical and chemical properties	Value	Determination method
Density and/or relative density	1,25 ± 0,05 (20°C)	
Relative vapour density	not determined as deemed not relevant to the characterization of the product	
Particle characteristics	not determined as considered not relevant for the characterization of the product	

9.2. Other information

9.2.1 Information with regard to physical hazard classes

No data available.

9.2.2 Other safety characteristics

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

Potassium hydroxide:

May be corrosive to metals. It is not pyrophoric. Reacts exothermically with water and acids

10.2. Chemical stability

Stable under indicated conditions of use and storage

10.3. Possibility of hazardous reactions

Very exothermic reaction with acids.

10.4. Conditions to avoid

Light, heat.

10.5. Incompatible materials

It can generate flammable gas in contact with halogenated organic substances, elemental metals

10.6. Hazardous decomposition products

Potassium hydroxide:

In the event of decomposition, Potassium oxide gas can be produced

SECTION 11. Toxicological information

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

ATE(mix) oral = 1.387,5 mg/kg

(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

=====

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

=====

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

=====

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

=====
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

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

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

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 in a proportion $\geq 0.1\%$.

Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC in a proportion $\geq 0.1\%$.

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

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 and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H290 - May be corrosive to metals. Classification procedure: On basis of test data

H302 - Harmful if swallowed. Classification procedure: Calculation method

H314 - Causes severe skin burns and eye damage. Classification procedure: Calculation method

H318 - Causes serious eye damage. Classification procedure: Calculation method

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.

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

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

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50
COD: Chemical Oxygen Demand
DNEL: Derived No Effect Level
EC50: half maximal Effective Concentration
ERC: Environment Release Classes
EU/UE: European Union
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods code
Kow: Octanol water partition coefficient
NOEC: No Observed Effect Concentration
OEL: Occupational Exposure Limit
PBT: Persistent Bioaccumulative and Toxic
PC: Product Categories
PNEC: Predicted No Effect Concentration
PROC: Process Categories
RID: Règlement concernant le transport International ferroviaire des marchandises dangereuses (Regulations concerning International rail transport of dangerous goods)
STOT: Target Organ Systemic Toxicity
STOT (RE): Repeated Exposure
STOT (SE): Single Exposure
STP: Sewage Treatment Plants
SU: Sector of Use
SVCH: Substance of Very High Concern
TLV: Threshold Limit Value
vPvB: Very Persistent Very Bioaccumulative

References and Sources:

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

This msds was made in good faith by 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: updating to reg. 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

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

<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

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

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

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

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

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

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

General description of the process covered

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

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

<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

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

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

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

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_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

<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

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

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

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

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_13_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

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

<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

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

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

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

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

WORKING ISTRUCTION TABLE



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

Attached to MSDS rel#7 09/05/2022

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]; Treatment of articles by dipping and pouring [PROC13]
Product name	REMOX
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 (8%) 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/protective clothing/eye protection/face protection. At work do not eat or drink.
Handling of the diluted product	Avoid contact and inhalation of vapors Wear protective gloves/protective clothing/eye protection/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 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
Diluted product	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
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.