

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

### 1.1. Product identifier

Product name : REMOVIL  
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

AEB SpA

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AEB USA

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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 dust.

P280 - Wear protective gloves/protective clothing/eye protection/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:**

Sodium hydroxide, Disodium metasilicate

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

5% < 15% phosphates, < 5% 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

The use of this chemical agent involves the obligation of "risk assessment" by the employer in accordance with the provisions of Dlgs n. 81. April 9, 2008. Workers exposed to this chemical agent should not be subject to health surveillance if the results of the risk assessment show that, depending on the type and quantity of dangerous chemical agent and method and frequency of exposure to the agent, there is only a "moderate Risk" for the health and safety of workers and that the measures laid down in the Decree are sufficient to reduce the risk.

For professional use only

**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	Classification	Index	CAS	EINECS	REACH
Sodium hydroxide	> 50 <= 100%	Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	011-002-00-6	1310-73-2	215-185-5	01-2119457 892-27-XXX X
Disodium metasilicate	> 5 <= 10%	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 carbonate	> 1 <= 5%	Eye Irrit. 2, H319	011-005-00-2	497-19-8	207-838-8	01-2119485 498-19-XXX X

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
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## 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:

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

If ingested, it can cause chemical burns in the mouth and throat.  
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, 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 and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)  
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  
Inform the competent 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 elimination.

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**

Wear protective gloves/protective clothing/eye protection/face protection.  
In residential areas do not use on large surfaces.  
At work do not eat or drink.  
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**

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Related to contained substances:

Sodium hydroxide:

Limit value – Eight hours  
(ppm)/(mg/m<sup>3</sup>)

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

USA – OSHA: x/2

Limit Value – Short Term

(ppm)/(mg/m<sup>3</sup>)

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  
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 mg/m<sup>3</sup>  
Czech Republic: PEL 1 mg/m<sup>3</sup>/ NPK-P 2 mg/m<sup>3</sup>  
Italy: OEL: ACGIH -STEL: C 2.0 mg/m<sup>3</sup>; Tipo OEL: ACGIH - STEL: C2 mg/m<sup>3</sup> - Note: URT, eye, and skin irr  
Estonia: short-term exposure limit (maximum chemical substance average allowable concentration in inhaled air - 15 minutes) 2 mg/m<sup>3</sup>(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/m<sup>3</sup>  
Lithuania: NRD 2 mg/m<sup>3</sup>  
Slovakia: NPEL 2 mg/m<sup>3</sup>  
South Africa: Short Term OEL-CL 2 mg/m<sup>3</sup>

Sodium carbonate:

Tipo OEL: OEL TWA: 10mg/m<sup>3</sup>

- Substance: Sodium hydroxide

DNEL

Systemic effects Short term Workers inhalation = 1 (mg/m<sup>3</sup>)  
Systemic effects Short term Consumers inhalation = 1 (mg/m<sup>3</sup>)  
Local effects Short term Workers inhalation = 1 (mg/m<sup>3</sup>)  
Local effects Short term Consumers inhalation = 1 (mg/m<sup>3</sup>)

- Substance: Disodium metasilicate

DNEL

Systemic effects Long term Workers inhalation = 6,22 (mg/m<sup>3</sup>)  
Systemic effects Long term Workers dermal = 1,49 (mg/kg bw/day)  
Systemic effects Long term Consumers inhalation = 1,55 (mg/m<sup>3</sup>)  
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 carbonate

DNEL

Local effects Long term Workers inhalation = 10  
Local effects Long term Consumers inhalation = 10 (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) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic

(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 ABECK filters (EN 405) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic.

For diluted product:

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

(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	Light colored specks	



Physical and chemical properties	Value	Determination method
Odour	not determined because it is considered not relevant for characterization of the product	
Odour threshold	not determined because it is considered not relevant for characterization of the product	
pH	>12 (20°C; sol. 8%)	
Melting point/freezing point	not determined because it is considered not relevant for characterization of the product	
Initial boiling point and boiling range	not determined because it is considered not relevant for characterization of the product	
Flash point	not determined because it is considered not relevant for characterization of the product	
Evaporation rate	not determined because it is considered not relevant for characterization of the product	
Flammability (solid, gas)	not determined because it is considered not relevant for characterization of the product	
Upper/lower flammability or explosive limits	not determined because it is considered not relevant for characterization of the product	
Vapour pressure	not determined because it is considered not relevant for characterization of the product	
Vapour density	not determined because it is considered not relevant for characterization of the product	
Relative density	1,05 ± 0,05 (20°C)	
Solubility	in water	
Water solubility	soluble in all proportions	
Partition coefficient: n-octanol/water	not determined because it is considered not relevant for characterization of the product	
Auto-ignition temperature	not determined because it is considered not relevant for characterization of the product	
Decomposition temperature	not determined because it is considered not relevant for characterization of the product	
Viscosity	not determined because it is considered not relevant for characterization of the product	
Explosive properties	not determined because it is considered not relevant for characterization of the product	
Oxidising properties	not determined because it is considered not relevant for characterization of the product	

## 9.2. Other information

No data available.

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

Strong base

### 10.2. Chemical stability

In contact with air it produces carbonates

### 10.3. Possibility of hazardous reactions

Reacts with aluminum, tin, zinc and their alloys, bronze, lead, etc. by emitting hydrogen. Very exothermic reaction with strong acids, exothermic reaction with water

### 10.4. Conditions to avoid

store in a cool, dry place

### 10.5. Incompatible materials

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

### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11. Toxicological information

### 11.1. Information on toxicological effects

ATE(mix) oral = ∞

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: 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

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 carbonate: Ingestion - LD50 rat (mg / kg / 24h bw): 2800

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

Inhalation - LD50 rat (mg / l / 4h): 2.3

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

Sodium hydroxide: Corrosive

Disodium metasilicate: Corrosive

Sodium carbonate: Non-corrosive

Sodium hydroxide: Irritating

Disodium metasilicate: Irritating

Sodium carbonate: 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.

Sodium hydroxide: Corrosive

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

Sodium carbonate: Non-corrosive

Sodium hydroxide: Irritating

Disodium metasilicate: Irritating

Sodium carbonate: Irritating

(d) respiratory or skin sensitization: Sodium hydroxide: Not sensitizing

Disodium metasilicate: Non-sensitizing (LLNA)

Sodium carbonate: Non-sensitizing

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

Disodium metasilicate: Not mutagenic

Sodium carbonate: Non-mutagenic

(f) carcinogenicity: Sodium hydroxide: Not carcinogenic

Disodium metasilicate: Not carcinogenic

Sodium carbonate: Non-carcinogenic

(g) reproductive toxicity: Sodium hydroxide: Non-toxic for reproduction

Disodium metasilicate: Effects on fertility: NOAEL (Rat) > 159 mg / kg bw / d. Developmental effects: NOAEL (Mouse) > 260 mg / kg bw / d.

Sodium carbonate: Non-toxic for reproduction

(h) specific target organ toxicity (STOT) single exposure: Sodium hydroxide: The substance can be absorbed into the body by inhalation of its aerosols and by ingestion.

Disodium metasilicate: Irritates respiratory systems

Sodium carbonate: Not available

(i) specific target organ toxicity (STOT) repeated exposure: Sodium hydroxide: The substance can be absorbed into the body by inhalation of its aerosols and by ingestion. The symptoms of pulmonary edema often do not manifest themselves before a few hours and are exacerbated by physical exertion. Rest and medical observation are therefore essential

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 carbonate: Not available

(j) aspiration hazard: Sodium hydroxide: Not available

Disodium metasilicate: Not available

Sodium carbonate: Not available

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Related to contained substances:

Sodium hydroxide:

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1350

## SECTION 12. Ecological information

### 12.1. Toxicity

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Related to contained substances:

Sodium hydroxide:

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

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

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

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

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Chronic toxicity - crustaceans NOEC (mg / l): nd  
Chronic toxicity NOEC algal (mg / l): nd  
C(E)L50 (mg/l) = 45

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 carbonate:

Acute toxicity - LC50 fish (mg / l / 96h):> 300  
Acute toxicity - crustaceans EC50 (mg / l / 48h): 210  
Acute toxicity algae ErC50 (mg / l / 72-96h): 740

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:  
Sodium hydroxide:  
Not applicable

Disodium metasilicate:  
Not applicable

Sodium carbonate:  
Not available

### 12.3. Bioaccumulative potential

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Related to contained substances:  
Sodium hydroxide:  
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 carbonate:  
Not available

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#### **12.4. Mobility in soil**

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Related to contained substances:

Sodium hydroxide:

Not applicable

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, SiO<sub>2</sub> 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 SiO<sub>2</sub>/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 SiO<sub>2</sub>/L (HERA 2005).

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

Sodium carbonate:

Not available

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

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

#### **12.6. Other adverse effects**

No adverse effects

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

The (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: 3262

If subject to the following characteristics is ADR exempt:

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

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



**14.2. UN proper shipping name**

ADR/RID/IMDG: SOLIDO INORGANICO CORROSIVO, BASICO, N.A.S. (Idrossido di sodio in miscela)

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

ICAO-IATA: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (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 kg

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

### 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

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.  
H314 = Causes severe skin burns and eye damage.  
H318 = Causes serious eye damage.  
H335 = May cause respiratory irritation.  
H319 = Causes serious eye irritation.

Classification based on data of all mixture components

Main normative references:

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

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  
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 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: label elements variation, exposure scenario updating, working instruction table.

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**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></p> <p><b>Don't smoke.</b></p> <p><b>Don't use in proximity of open flame.</b></p>	
<p><b>Wash hands after use.</b></p> <p><b>Avoid contact with damaged skin.</b></p> <p><b>Do not mix with other products.</b></p>	
<b>Spillage instructions</b>	Dilute with fresh water and mop up.
<b>Hygiene practices</b>	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**

<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><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\_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><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**

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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#6 01/16/20

Use description	[PROC4] Use in batch and other process (syn- thesis) where opportunity for exposure arise, [PROC8b]Transfer of substance or preparation (charging/discharging) from/to ves- sels/ large containers at dedicated facilities spraying[PROC11] [PROC13]Treatment of articles by dipping and pouring
Product name	<b>REMOVIL</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.
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (8%) the product is classified: H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage.
Handling of the product (100%)	Avoid contact and inhalation of dust 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, mask and protective clothing (for specifications refer to section 8.2. SDS) After wiping up, wash with water the area and materials involved
Diluted product	Wear gloves, mask and protective clothing. Wash with water the area and materials involved
Storage of the product	Keep in original container closed tightly. Do not store in open or unlabelled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool and dry place, away from heat sources and direct exposure to sunlight.
In case of accidents, emergency or fire	Immediately inform the customer. Follow company emergency instruction.