AEB

SAFETY DATA SHEET

REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#1/17

In conformity to Regulation (EU) 2015/830

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

1.1. Product identifier

Product name: REMOVIL OX

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

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



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#2/17

In conformity to Regulation (EU) 2015/830

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

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



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

In conformity to Regulation (EU) 2015/830

Precautionary statements:

Prevention

P260 - Do not breathe dust

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

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

Contains (Reg.EC 648/2004):

5% < 15% oxygen-based bleaching agents,< 5% phosphonates, 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.

Do not ingest. Keep out of reach of children.

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[w/w]	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
Sodium carbonate	>= 10 < 20%	Eye Irrit. 2, H319	011-005-00-2	497-19-8	207-838-8	01-2119485 498-19-XXX X

#3/17



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#4/17

In conformity to Regulation (EU) 2015/830

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Sodium percarbonate	>= 10 < 20%	Ox. Sol. 2, H272; Acute Tox. 4, H302; Eye Dam. 1, H318		15630-89-4	239-707-6	01-2119457 268-30-XXX X
(1-hydroxyethylidene)bisphospho nic acid, sodium salt	>= 1 < 5%	Acute Tox. 4, H302			701-238-4	01-2119510 382-52-XXX X

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 watrer.

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

Ingestion can cause chemical burns in the mouth and throat.

Contact with skin can cause burns.

Contact with eyes causes severe 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.



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#5/17

In conformity to Regulation (EU) 2015/830

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:

Move away from the area surrounding the spill or release. Not smoking. Wear a mask, gloves and protective clothing.

6.1.2 For emergency responders:

Eliminate all open flames and possible sources of ignition. Not smoking. Provide adequate ventilation. Evacuate the danger area and, if necessary, 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



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#6/17

In conformity to Regulation (EU) 2015/830

7.1. Precautions for safe handling

Wear protective gloves/clothing and eye/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 ° C - 30 ° C)

Manufacture of food products:

Handle with Care. Store in a clean, dry and ventilated place, away from heat and direct sunlight. Keep container tightly closed. (7 ° C - 30 ° C)

See the annex exposure scenario.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:

Sodium hydroxide:

Limit value - Eight hours

(ppm)/(mg/m3)

Austria: x/2 inhalable aerosol

Belgium: x/2 (1) Denmark: x/2 France: x/2 Hungary: x/2

Japan (JSOH): x/2(1)

Latvia: x/0,5 Poland: x/0,5 Romania: x/1 Spain: x/2 Sweden: x/1 (1)

Switzerland: x/2 inhalable aerosol

USA - OSHA: x/2

Limit Value - Short Term

(ppm)/(mg/m3) Austalia: 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)



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#7/17

In conformity to Regulation (EU) 2015/830

New Zealand: x/2(1)

People's Republic of China: x/2(1)

Poland: x/1 Romaniax/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) Celling limit value

Canada – Ontario: (1) Celling limit value Canada – Québec: (1) Celling limit value

Finland: (1) Celling 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) Celling limit value

People's Republic of China: (1) Celling limit value

South Korea: (1) Celling limit value Romania: (1) 15 minutes average value

Sweden: (1) Inhalable dust (2) Celling limit value USA – NIOSH: (1) Celling limit value (15 min)

Argentine: CMP-C: 2 mg mg/m3

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

Italy: OEL: ACGIH -STEL: C 2.0 mg/m3; Tipo OEL: ACGIH - STEL: C2 mg/m3 - Note: URT, eye, and skin irr Estonia: short-term esposure limit (maximum chemical substance average allowable concentration in inhaled air - 15 minutes) 2 mg/m3(Ceiling limit" means a maximum permissible continuous concentration of 15 minutes in the air for rapidly acting substances)

Norvay: 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

inat should not be exceeded).

Lithuania: NRD 2 mg/m3 Slovakia: NPEL 2 mg/m3

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

Sodium carbonate:

Tipo OEL: OEL TWA: 10mg/m3

- Substance: Sodium hydroxide

DNEL

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

- Substance: Sodium carbonate

DNEL

Local effects Long term Workers inhalation = 10

Local effects Long term Consumers inhalation = 10 (mg/m3)

- Substance: Sodium percarbonate

DNEL

Systemic effects Short term Workers dermal = 12,8 (mg/kg bw/day) Systemic effects Short term Consumers dermal = 6,4 (mg/kg bw/day)

Local effects Long term Workers inhalation = 5

Local effects Long term Consumers inhalation = 5 (mg/m3)

PNEC



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#8/17

In conformity to Regulation (EU) 2015/830

Sweet water = 0,035 (mg/l) Sea water = 0,035 (mg/l) STP = 16,24 (mg/l)

- Substance: (1-hydroxyethylidene)bisphosphonic acid, sodium salt

DNEL

Systemic effects Long term Workers inhalation = 2,95 (mg/m3) Systemic effects Long term Workers dermal = 17 (mg/kg bw/day)

PNEC

Sweet water = 0,068 (mg/l)

sediment Sweet water = 136 (mg/kg/sediment)

Sea water = 0,007 (mg/I)

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)

(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 diluited 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.



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

#9/17

In conformity to Regulation (EU) 2015/830

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	white granular powder	
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	
рН	13.0 ± 0.5 (20 ° C; sol 5%)	
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	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	1.05 ± 0.05 (20 ° C)	
Solubility	in water	
Water solubility	miscible	
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.

AEB

SAFETY DATA SHEET

REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

10 / 17

In conformity to Regulation (EU) 2015/830

10.1. Reactivity

Strong base

10.2. Chemical stability

Carbonates are in contact with air

10.3. Possibility of hazardous reactions

Reacts with aluminum, pond, 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. Less than 7 ° C and as provided for in 10.3

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Do not decompose if used for intended uses.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 5.100,6 mg/kg 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 / I / 4h): nd

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

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

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



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

11 / 17

In conformity to Regulation (EU) 2015/830

Sodium percarbonate: Ingestion - LD50 rat (mg / kg / 24h bw): 1034

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

Inhalation - LD50 rat (mg / I / 4h): 0.7

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Ingestion-rat LD50 (mg/kg/bw 24h): 300-2000

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

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

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

Sodium hydroxide: Corrosive Sodium carbonate: Non-corrosive Sodium percarbonate: Not corrosive

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-corrosive

Sodium hydroxide: Irritating Sodium carbonate: Irritating Sodium percarbonate: Not irritating

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-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 Sodium carbonate: Non-corrosive Sodium percarbonate: Not corrosive

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-corrosive

Sodium hydroxide: Irritating Sodium carbonate: Irritating Sodium percarbonate: Irritating

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-irritating (d) respiratory or skin sensitization: Sodium hydroxide: Not sensitizing

Sodium carbonate: Non-sensitizing Sodium percarbonate: Not sensitizing

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-sensitizing

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

Sodium carbonate: Non-mutagenic Sodium percarbonate: Not mutagenic

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-mutagenic

(f) carcinogenicity: Sodium hydroxide: Not carcinogenic

Sodium carbonate: Non-carcinogenic Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Non-carcinogenic (g) reproductive toxicity: Sodium hydroxide: Non-toxic for reproduction

Sodium carbonate: Non-toxic for reproduction Sodium percarbonate: Not toxic for re-circulation

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: 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.

Sodium carbonate: Not available Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Not available

(i) specific target organ toxicity (STOT) repeated exposureSodium 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

Sodium carbonate: Not available Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Not available

(j) aspiration hazard: Sodium hydroxide: Not available

Sodium carbonate: Not available Sodium percarbonate: Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt: Not disponibile



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

12 / 17

In conformity to Regulation (EU) 2015/830

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Sodium hydroxide:

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

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

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

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

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

Chronic toxicity NOEC algal (mg / I): nd

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

Sodium carbonate:

Acute toxicity - LC50 fish (mg / I / 96h):> 300

Acute toxicity - crustaceans EC50 (mg / I / 48h): 210

Acute toxicity algae ErC50 (mg / I / 72-96h): 740

Sodium percarbonate:

Acute toxicity - fish LC50 (mg / I / 96h): 70.7

Acute toxicity - crustaceans EC50 (mg / I / 48h): 4.9

Acute toxicity - algae ErC50 (mg / l): 2 (Daphnia pulex)

Chronic toxicity - fish NOEC / 96h (mg / I): 7.4 (Pimephales promelas)

(1-hydroxyethylidene)bisphosphonic acid, sodium salt:

Acute toxicity-fish LC50 (mg/l/96h): 2670-3400

Acute toxicity-crustacea EC50 (mg/l/48 h): 466-610

Acute algae toxicity ErC50 (mg/l/72-96h): > 960

Chronic toxicity-crustaceans NOEC (mg/l): 0.1

C(E)L50 (mg/I) = 466

NOEC (mg/l) = 0,1

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

12.2. Persistence and degradability

Related to contained substances:

Sodium hydroxide:

Not applicable

Sodium carbonate:

Not available

Sodium percarbonate:

Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt:



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

13 / 17

In conformity to Regulation (EU) 2015/830

- ~ 50% OECD 302 B
- * COD (Std. Method 5220 D): 330 mg / g
- * BOD-5 (Std. Method 5210 B): 20 mg / g
- * MBAS: 0 mg / g * BiAS: 0 mg / g

12.3. Bioaccumulative potential

Related to contained substances:

Sodium hydroxide:

Not bioaccumulative

Sodium carbonate:

Not available

Sodium percarbonate:

Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt:

No other information available

12.4. Mobility in soil

Related to contained substances:

Sodium hydroxide:

Not applicable

Sodium carbonate:

Not available

Sodium percarbonate:

Not available

(1-hydroxyethylidene)bisphosphonic acid, sodium salt:

Not available

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Other adverse effects

No adverse effects

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

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

SECTION 13/Dispose true nicheminous

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.



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

14 / 17

In conformity to Regulation (EU) 2015/830

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 skrink-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) ADR/RID/IMDG: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide) ICAO-IATA: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide)

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



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

15 / 17

In conformity to Regulation (EU) 2015/830

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

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

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

Reg. (EU) n. 1169/2011: see 2.2

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

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.2. Label elements, 2.3. Other hazards, 4.2. Most important symptoms and effects, both acute and delayed, 6.1. Personal precautions, protective equipment and emergency procedures, 6.2. Environmental precautions, 6.3. Methods and material for containment and cleaning up, 6.4. Reference to other sections, 7.1. Precautions for safe handling, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 10.6. Hazardous decomposition products, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 12.5. Results of PBT and vPvB assessment, 12.6. Other adverse effects, 13.1. Waste treatment methodst

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.

H319 = Causes serious eye irritation.

H272 = May intensify fire; oxidiser.

H302 = Harmful if swallowed.

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 seg.

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.



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

16 / 17

In conformity to Regulation (EU) 2015/830

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

Agreement concerning the International Carriage of Dangerous Goods by Road)

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

CAP: Centre AntiPoison

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

Chemical Substances)

CL50/LC50: Lethal Concentration 50

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

EC50: half maximal Effective Concentration

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

STOT: Target Organ Systemic Toxicity

STOT (RE): Repeated Exposure STOT (SE): Single Exposure STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

vPvB: Very Persistent Very Bioaccumulative

References and Sources:

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



REMOVIL OX

Issued on 06/08/2020 - Rel. # 6 on 06/08/2020

17 / 17

In conformity to Regulation (EU) 2015/830

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: generall elements variation, exposure scenario updating, working istruction table.

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

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

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

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

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

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

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

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

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

Additional good practice advice

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

Additional information depending on product composition

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

Disclaimer

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

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

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

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/

Attached to MSDS rel#6 06/08/20

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	REMOVIL OX
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 (5%) 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 use, spillage)	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).
Diluited 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
Diluited 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.