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In conformity to Regulation (EU) 2020/878

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

1.1. Product identifier

Product name: REASE

Product code: refer to sales department

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

Acid cleaner

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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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.

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements

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

Pictogram, Signal Word Code(s):

GHS05 - Danger

Hazard statement Code(s):





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H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:

Prevention

P260 - Do not breathe vapours/spray.

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

Response

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

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

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

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

Contains:

orthophosphoric acid, citric acid

Contains (Reg.EC 648/2004):

< 5% amphoteric surfactants

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

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

The use of this chemical agent implies the obligation of the "risk assessment" by the employer according to the provisions of Legislative Decree April 9, 2008 no. 81 and subsequent amendments. If the results of the risk assessment demonstrate that, in relation to the type, quantity, methods and frequency of exposure, there is only a low risk for the safety and irrelevant for the health of the workers and that the measures referred to in paragraph 1 of Legislative Decree April 9, 2008 no. 81 are sufficient to reduce the risk, the provisions of articles 225, 226, 229, 230 of the same Legislative Decree do not apply

Do not ingest. Keep out of reach of children.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures



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Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Citric acid	>= 10 < 25%	Eye Irrit. 2, H319		5949-29-1	201-069-1	01-2119457 026-42-XXX X
Orthophosphoric acid (B)	>= 5 < 10%	Met. Corr. 1, H290; Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318 Limits: Skin Corr. 1B, H314 %C >=25; Skin Irrit. 2, H315 10<= %C <25; Eye Irrit. 2, H319 10<= %C <25; ATE oral = 500,000 mg/kg	015-011-00-6	7664-38-2	231-633-2	01-2119485 924-24-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:

Rinse mouth immediately.

Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

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

Contact with eyes causes irritation, including redness and tear.

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

Immediately call a POISON CENTER or a doctor.

SECTION 5. Firefighting measures

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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. 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.

Privide 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 materia or sucked 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.

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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.
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:

Citric acid:

TLV - TWA (Threshold Limit Value - Time Weighted Average) - Eight hours (ppm)/(mg/m³)

Germany (AGS): x/2(1) Remarks: (1) Inhalable fraction

Germany (DFG); x/2(1) Remarks: (1) Inhalable fraction and vapour

Switzerland: x/2(1) Remarks:(1) Inhalable fraction

TLV-STEL Threshold limit value - short-term exposure limit (ppm)/(mg/m³)

Germany (AGS): x/4(1)(2) Remarks: (1) Inhalable fraction (2) 15 minutes average value

Germany (DFG): x/4(1)(2) Remarks: (1) Inhalable fraction and vapour (2) 15 minutes average value

Switzerland: x/4(1)(2) Remarks: (1) Inhalable fraction(2) 15 minutes average value

Orthophosphoric acid:

TLV - TWA (Threshold Limit Value - Time Weighted Average) - Eight hours (ppm)/(mg/m³)

Australia: X/1



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Austria: X/1 Belgium: X/1

Canada - Ontario: x/1 Canada - Québec: x/1

Denmark: x/1

European Union: x/1

Finland: x/1 France: 0,2/1

Germany (AGS): x/2(1) Remarks: (1) inhalable aerosol Germany (DFG): x/2(1) Remarks: (1) Inhalable fraction

Hungary: x/1 Ireland: x/1 Italy: x/1

Japan (JSOH): x/1

Latvia: x/1 New Zealand: x/1 Norway: x/1

People's Republic of China: x/1

Poland: x/1
Romania: x/1
Singapore: x/1
South Africa: x/2
South Africa Mining: x/1
South Korea: x/1

Spain: x/1 Sweden: x/1

Switzerland: x/2(1) Remarks: (1) Inhalable fraction

The Netherlands: x/1 USA - NIOSH: x/1 USA - OSHA: x/1 United Kingdom: x/1

TLV-STEL Threshold limit value - short-term exposure limit (ppm)/(mg/m³)

Austria: x/2

Belgium: x/2(1) Remarks: (1) 15 minutes average value

Canada - Ontario: x/3

Canada - Québec: x/3(1) Remarks: (1) 15 minutes average value

Denmark: x/2

European Union: x/2(1) General remarks: Bold-type: Indicative occupational exposure limit value (IOELV) - Remarks:

(1) 15 minutes average value

Finland: x/2(1) Remarks: (1)15 minutes average value

France: 0,5(1)/2(1) General remarks: Italics type: Indicative statutory limit values Remarks: (1) 15 minutes average value

Germany (AGS): x/4(1)(2) Remarks: (1) inhalable aerosol (2) 15 Minutes average value Germany (DFG):x/4(1)(2) Remarks:(1) Inhalable fraction (2) 15 minutes average value

Hungary: x/2(1) Remarks: (1)15 minutes average value Ireland: X/2(1) Remarks: (1) 15 minutes reference period Italy: x/2(1) Remarks: (1) 15 minutes average value Latvia: x/2(1) Remarks: (1) 15 minutes average value

People's Republic of China: x/3(1) Remarks:(1) 15 minutes average value

Poland: x/2(1) Remarks: (1) 15 minutes average value Romania: x/2(1) Remarks: (1) 15 minutes average value South Africa: x/6(1) Remarks: (1) 15 minutes average value South Africa Mining: x/3(1) Remarks: (1) 15 minutes average value South Korea: x/3(1) Remarks: (1) 15 minutes average value

Spain: x/2(1) Remarks: (1) 15 minutes average value Sweden: x/2(1) Remarks: (1) 15 minutes average value

Switzerland: x/4(1)(2) Remarks: (1) Inhalable fraction (2) 15 minutes average value

The Netherlands: x/2(1) Remarks: (1) 15 minutes average value

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USA - NIOSH: x/3(1) Remarks: (1) 15 minutes average value United Kingdom: x/2(1) Remarks: (1) 15 minutes average value

- Substance: Citric acid PNEC Sweet water = 0,44 (mg/l) sediment Sweet water = 34,6 (mg/kg/sediment) Sea water = 0,044 (mg/l) sediment Sea water = 3,46 (mg/kg/sediment) STP = 1000 (mg/l) ground = 33,1 (mg/kg ground)

- Substance: Orthophosphoric acid

DNEL

Systemic effects Long term Workers inhalation = 10,7 (mg/m3) Systemic effects Long term Consumers inhalation = 4,57 (mg/m3) Systemic effects Long term Consumers oral = 0,1 (mg/kg bw/day) Local effects Long term Workers inhalation = 1 (mg/m3) Local effects Long term Consumers inhalation = 0,36 (mg/m3) Local effects Short term Workers inhalation = 2 (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.

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



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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 considered not relevant for the characterization of the product	
Odour threshold	not determined as considered not relevant for the characterization of the product	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Boiling point or initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flammability	not determined as considered not relevant for the characterization of the product	
Lower and upper explosion limit	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	
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	
рН	<2,0 (20°C; sol. 4%); <2,0 (20°C; 100%)	
Kinematic viscosity	not determined as considered not relevant for the characterization of the product	
Solubility	in water	
Water solubility	miscible in all proportions	
Partition coefficient n-octanol/water (log value)	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	
Density and/or relative density	1,15 ± 0,05 (20 ° C)	
Relative vapour density	not determined as considered not relevant for the characterization of the product	
Particle characteristics	not determined as considered not relevant for the characterization of the product	

9.2. Other information



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9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity

10.1. Reactivity

Acid

10.2. Chemical stability

Stable at room temperature and under normal conditions of use

10.3. Possibility of hazardous reactions

Reacts exothermically with water. Reacts vigorously with reducing agents, strong bases, organic materials and chlorides. Reaction with the most common metals can release oxygen.

10.4. Conditions to avoid

Direct heat and as specified in 10.3

10.5. Incompatible materials

It can generate flammable gases in contact with elementary metals, nitrides, inorganic sulphides, strong reducing agents. It can generate toxic gases in contact with inorganic sulphides, strong reducing agents.

10.6. Hazardous decomposition products

The product in contact with metals develops hydrogen.



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SECTION 11. Toxicological information

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

ATE(mix) oral = 6.666,7 mg/kg

(a) acute toxicity: Citric acid: Ingestion - LD50 rat (mg/kg/24h bw): nd

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

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

Orthophosphoric acid: Ingestion - LD50 rat (mg/kg/24h bw): 300-2000 mg/kg bw - Notes: OECD Guideline 423 (Acute

Oral toxicity - Acute Toxic Class Method)

Contact with skin - LC50 rat/rabbit (mg/kg/ 24h bw): >2000

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

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

Citric acid: Not corrosive

Orthophosphoric acid: Corrosive

Citric acid: Not irritating

Orthophosphoric acid: 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.

Citric acid: Not corrosive

Orthophosphoric acid: Corrosive

Citric acid: Irritating

Orthophosphoric acid: Irritating

(d) respiratoryorskinsensitisation: Citric acid: Not available

Orthophosphoric acid: Not available

(e) germ cell mutagenicity: Citric acid: Not mutagenic

Orthophosphoric acid: Non-mutagenic

(f) carcinogenicity: Citric acid: Not carcinogenic Orthophosphoric acid: Non-carcinogenic

Orthophosphoric acid: Non-carcinogenic
(g) eproductivetoxicity: Citric acid: Non-toxic for reproduction

Orthophosphoric acid: Non-toxic for reproduction

(h) specific target organ toxicity (STOT) single exposure: Citric acid: Not available

Orthophosphoric acid: Not available

(i) specific target organ toxicity (STOT) repeated exposureCitric acid: Rat: NOAEL: 4,000 mg / kg

LOAEL: 8,000 mg / kg Application method: Oral Exposure time: 10 d

Doses: 2, 4, 8, 16 g / kg bw / day Orthophosphoric acid: Not available

(j) aspiration hazard: Citric acid: Unavailable

Orthophosphoric acid: Not available

Related to contained substances:

Orthophosphoric acid:

LD50 (rat) Oral (mg/kg body weight) = 500



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11.2. Information on other hazards

No data available.

11.2.1. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Citric acid:

Acute toxicity - fish LC50 (mg / I / 96h): 440

Acute toxicity - crustaceans EC50 (mg / I / 48h): 1535

Acute toxicity algae ErC50 (mg / I / 72-96h): 425

C(E)L50 (mg/l) = 1535 Acute toxicity M-factor = 1

Chronic toxicity M-factor = 1

Orthophosphoric acid:

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

Acute toxicity - crustaceans EC50 (mg/l/48h): na Daphnia magna

Acute toxicity algae ErC50 (mg/l/72-96h): >100

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

Chronic toxicity - crustaceans NOEC (mg/l): 56

Chronic toxicity algae NOEC (mg/l): 100 (72h) Toxicity of microorganisms: EC50 (3 h)1 g/L- NOEC (3 h)1g/L

Acute toxicity M-factor = 1 Chronic toxicity M-factor = 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:

Citric acid:

Easily biodegradable

Orthophosphoric acid: Not readily biodegradable

12.3. Bioaccumulative potential

Related to contained substances:

Citric acid:

Not bioaccumulative

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Orthophosphoric acid: Not bioaccumulative

12.4. Mobility in soil

Related to contained substances:

Citric acid: Unavailable

Orthophosphoric acid:

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

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

12.7. 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. 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: 3264

If subject to the following characteristics is ADR exempt: Combination packagings: per inner packaging 5 L per package 30 kg



Inner packaging placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 L per package 20 kg

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14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO INORGANICO CORROSIVO, ACIDO, N.A.S. (Acido fosforico e citrico in miscela) ADR/RID/IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Orthophosphoric and citric acid in mixture) ICAO-IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Orthophosphoric and citric acid 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 : 5 L

IMDG - EmS: F-A, S-B

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

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 the substances contained (Annex XVII EC Reg. 1907/2006): not applicable Substances in Candidate list (art. 59 EC Reg. 1907/2006): the product does not contain SVHC in percentage = a 0.1 %.

Regulation (EC) 648/04: see point 2.2 Regulation (EU) 528/2012: see point 2.2 Regulation (EU) 1169/2011: see point 2.2



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Regulation (EU) 1308/2013; see point 2.2 Regulation (EC) 1333/2008; see point 2.2 Regulation (EC) 1332/2008; see point 2.2 REGULATION (EU) No 1357/2014 - waste: HP8 - Corrosive

15.2. Chemical safety assessment

A chemical safety assessment was carried out for the following substances:

citric acid orthophosphoric acid

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 11.2. Information on other hazards, 12.1. Toxicity, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties

Description of hazard statements set out in paragraph 3

H319 = Causes serious eye irritation.

H290 = May be corrosive to metals.

H302 = Harmful if swallowed.

H314 = Causes severe skin burns and eye damage.

H318 = Causes serious 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: 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 seg.

Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) 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 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



REASE

Issued on 07/23/2024 - Rel. # 8 on 07/23/2024

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In conformity to Regulation (EU) 2020/878

EC50: half maximal Effective Concentration

ERC: Enviroment Release Classes

EU/UE: European Union

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient NOEC: No Observed Effect Concentration OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement 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 raw material supplier
- 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: documental update

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.

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SUMI

Safe Use of Mixtures Information





AISE_SUMI_IS_8b_1

Version 1.1, August 2018

Transfer and dilution of concentrated product by using dedicated dosing system

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

General description of the process covered

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

Operational Conditions

Maximum duration	60 minutes per day.
Range of application /	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	See section 8 of the SDS of this product for specifications.
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.

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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

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.

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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#8 07/23/2024

Use description	Use in batch and other process (synthesis) where opportunity for exposure arises [PROC4]; Transfer of substance or mixture (charging and discharging) at dedicated facilities [PROC8b]; Treatment of articles by dipping and pouring [PROC13]
Product name	REASE
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	At maximux concentration of use (4%) the product is classified:
concentration)	H314 - Causes severe skin burns and eye damage. H318 - Causes serious eye damage.
Handling of the product (100%)	Avoid contact and inhalation of vapors Wear protective gloves/clothing and eye/face protection At work do not eat or drink.
Handling of the diluted product	Avoid contact and inhalation of vapors Wear protective gloves/clothing and eye/face protection At work do not eat or drink.
DPI required concentrated product (racking, concentrated use, spillage)	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).
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) Accidental release large quantities measures: concentrated product	Immediately inform the customer. Immediately inform the employer. Contact Poisons Centres tel. number in 1.4 section of the MSDS Wear gloves, mask, glasses and protective clothing (for specifications refer to section 8.2 . SDS). Possibly absorb it with inert materia or sucked it. After wiping up, wash with water the area and materials involved
Diluited 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.