

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

**1.1. Product identifier**

Product name : ACID N28  
Product code: refer to sales department

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

Descaling acidic detergent

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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AEB SpA  
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#### 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  
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AEB OCEANIA PTY LTD  
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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):  
EUH071 - Corrosive to the respiratory tract.

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:**

nitric acid, orthophosphoric acid

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

< 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

Do not ingest. Keep out of reach of children.

**SECTION 3. Composition/information on ingredients**

**3.1 Substances**

Irrilevant

**3.2 Mixtures**

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
Nitric acid (B)	>= 10 < 25%	EUH071; Ox. Liq. 2, H272; Met. Corr. 1, H290; Skin Corr. 1A, H314; Acute Tox. 3, H331 Limits: Skin Corr. 1A, H314 %C >=20; Skin Corr. 1B, H314 5<= %C <20; Ox. Liq. 2, H272 %C >=99; Ox. Liq. 3, H272 65<= %C <99;	007-004-00-1	7697-37-2	231-714-2	01-2119487 297-23-XXX X
Orthophosphoric acid (B)	>= 5 < 10%	Met. Corr. 1, H290; 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,	015-011-00-6	7664-38-2	231-633-2	01-2119485 924-24-XXX X

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		H319 10<= %C <25;				

## 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

Swallowing may cause chemical burns in the mouth and throat. In contact with skin it may cause burns. Contact with eyes causes very severe irritation, including redness and tear. Inhalation may cause asthma respiratory failure; Irritation of the mucous membranes and the respiratory tract may cause nausea and difficulty in breathing.

### 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

Recommended extinguishing media: Nebulized water, CO<sub>2</sub>, foam, chemical powders depending on the materials involved in the fire.

Extinguishing media to avoid: Water jets. Use water jets only to cool the surfaces of containers exposed to fire.

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

No data available.

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

Use respiratory protection. Full safety helmet and protective clothing. Water spray can be used to protect people involved in extinguishing. Cool containers with jets of water

## **SECTION 6. Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provide a sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

### **6.2. Environmental precautions**

Contain spills with earth or sand.

If the product has entered a watercourse, sewers or has contaminated soil or vegetation, notify the authorities.

Dispose of the waste material in compliance with the regulations

### **6.3. Methods and material for containment and cleaning up**

6.3.1 Containment:

Rapidly recover the product, wear a mask and protective clothing (for specifications refer to section 8.2. SDS)

Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material or suck it.

Prevent it from entering the sewer system.

6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

### **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

## **SECTION 7. Handling and storage**

### **7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors

Wear protective gloves/clothing and eye/face protection.

In residential areas do not use on large surfaces.

At work do not eat or drink.

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:

Nitric acid:

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

Australia: 2/5.2

Austria: x/x

Belgio: x/x

Canada – Ontario: 2/x

Canada - Québec: 2/5.2

Denmark: 2/5

European Union: x/x

Finland: 0.5/1.3

France: x/x

Germany (AGS): x/x

Hungary: x/x

Ireland: x/x

Italy: x/x

Japan – JSOH: 2/5.2

Latvia: 0.78/2

New Zealand: 2/5.2

Poland: x/1.4

Romania: x/x

Singapore: 2/5.2

South Korea: 2/5

Spain: x/x

Sweden: 0.5/1.3

Switzerland: 2/5

The Netherlands: x/x

Turkey: x/x

USA - NIOSH: 2/5

USA – OSHA: 2/5

United Kingdom: x/x

Slovakia: x/x

Limit value - Short term  
(ppm)/(mg/m<sup>3</sup>)

Australia: 4/10  
Austria: 1/2.6  
Belgio: 1/2.6  
Canada – Ontario: 4/x  
Canada - Québec: 4/10  
Denmark: 4/10  
European Union: 1/2.6  
Finland: 1 (1)/2.6 (1)  
France: 1/2.6  
Germany (AGS):1 (1)/2.6 (1)  
Hungary: x/2.6  
Ireland: 1 (1)/2.6 (1)  
Italy: 1/2.6  
Japan – JSOH: x/x  
Latvia: 1 (1)/2.6 (1)  
New Zealand: 4/10  
Poland: x/2.6  
Romania: 1(1)/2,5(1)  
Singapore: 4/10  
South Korea: 4/10  
Spain: 1/2.6  
Sweden: 1 (1)/2.6 (1)  
Switzerland: 2/5  
The Netherlands: x/1.3  
Turkey: 1 (1)/2.6 (1)  
USA - NIOSH: 4 (1)/10 (1)  
USA – OSHA: x/x  
United Kingdom: 1/2.6  
Slovakia: 1/2.6

Remarks

European Union: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] ~ (for references see bibliography)  
Finland - Belgium - Germany (AGS)- Latvia - Sweden - Turkey - USA - NIOSH: : (1) 15 minutes average values  
France: *Italic type*: Indicative statutory limit values  
Ireland: (1) 15 minutes average period  
Poland: nitric acid (V)

Tipo OEL: UE - STEL: 2.6 mg/m<sup>3</sup>, 1 ppm

Tipo OEL: ACGIH - TWA(8h): 2 ppm - STEL: 4 ppm - Note: URT and eye irr, dental erosion

Argentina: CMP 2 ppm - CMP/CP-CMC-C 4 ppm - PM 63,02 (irritation, corrosion, edema polmon)

Czech Republic: PEL 1 mg/m<sup>3</sup> - NPK-P 2,5 mg/m<sup>3</sup> - Poznámky: x - Prepočet: 0,382

Portugal : 8 horas x/x Curta duração: 2,6 mg/m<sup>3</sup>/ 1 ppm

Orthophosphoric acid:

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

Argentina x/1  
Australia: x/1  
Austria: x/1  
Belgium : x/1  
Canada-Ontario: x/1  
Canada-Québec: x/1  
Czech rep.: x/1

Denmark: x/1  
European Union: x/1  
Finland: x/1  
France: 0.2/1  
Germany (AGS): x/2 inhalable aerosol  
Germany (DFG): x/2 inhalable aerosol  
Hungary: x/1  
Ireland: x/1  
Italy: x/1  
New Zealand: x/1  
People's Republic of China: x/1  
Poland: x/1  
Portugal: x/1  
Singapore: x/1  
Slovakia: x/1  
South Korea : x/1  
Spain: x/1  
Sweden: x/1  
Switzerland: x/1  
The Netherlands: x/1  
Turkey: x/1  
USA – NIOSH: x/1  
USA – OSHA: x/1  
United Kingdom: x/1

Limit value – Short Term  
(ppm)/(mg/m<sup>3</sup>)

Argentina: x/3  
Australia: x/x  
Austria: x/2  
Belgium : x/2  
Canada-Ontario: x/3  
Canada-Québec: x/3  
Czech rep.: x/2  
Denmark: x/2  
European Union: x/2  
Finland: x/2(1)  
France: 0.5/2  
Germany (AGS): x/4 inhalable aerosol  
Germany (DFG): x/4 inhalable aerosol  
Hungary: x/2  
Ireland: x/2(1)  
Italy: x/2  
New Zealand: x/x  
People's Republic of China: x/3(1)  
Poland: x/2  
Portugal: x/2  
Singapore: x/x  
Slovakia: x/2  
South Korea : x/3  
Spain: x/2  
Sweden: x/3(1)  
Switzerland: x/2  
The Netherlands: x/2  
Turkey: x/2(1)  
USA – NIOSH: x/3(1)  
USA – OSHA: x/x  
United Kingdom: x/2

Remarks

European Union: Bold-type: Indicative Occupational Exposure Limit Values [2.3] and Limit Values for Occupational Exposure [4] ~ (for references see bibliography)

Finland: (1) 15 minutes average value

France: *Italic type*: Indicative satatutory limits value

Germany (AGS): (1) 15 minutes average value

Germany (DFG): STV 15 minutes value

Ireland: (1) 15 minutes reference period

People's Republic of China: (1) 15 minutes average value

Sweden: (1) Short-term value, 15 minutes average value

Turkey: (1) 15 minutes average value

USA – NIOSH: (1) 15 minutes average value

- Substance: Nitric acid

DNEL

Local effects Long term Workers inhalation = 1,3

Local effects Long term Consumers inhalation = 0,65 (mg/m3)

Local effects Short term Workers inhalation = 2,6 (mg/m3)

Local effects Short term Consumers inhalation = 1,3 (mg/m3)

- Substance: Orthophosphoric acid

DNEL

Local effects Long term Workers inhalation = 1

Local effects Long term Consumers inhalation = 0,73 (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

In case of insufficient ventilation or emergency, use mask with gas filters and inorganic vapors - Grey , Class 3 , B (EN 405) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic. None

required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements (89/656/EEC, 245/2016 UE), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization

(d) Thermal hazards  
No hazard to report

Environmental exposure controls:

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

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Clear liquid	
Colour	green	
Odour	not determined as it is considered not relevant for the characterization of the product	
Odour threshold	not determined as it is considered not relevant for the characterization of the product	
pH	0,5 ± 0,5 (20°C; 100%); 1,0 ± 0,5 (20°C; sol. 5%)	
Melting point/freezing point	not determined as it is considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as it is considered not relevant for the characterization of the product	
Flash point	not determined as it is considered not relevant for the characterization of the product	
Evaporation rate	not determined as it is considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as it is considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as it is considered not relevant for the characterization of the product	
Vapour pressure	not determined as it is considered not relevant for the characterization of the product	
Vapour density	not determined as it is considered not relevant for the characterization of the product	
Relative density	1,25 ± 0,05 (20 ° C)	
Solubility	in water	
Water solubility	miscible in all proportions	
Partition coefficient: n-octanol/water	not determined as it is considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as it is considered not relevant for the characterization of the product	
Decomposition temperature	not determined as it is considered not relevant for the characterization of the product	
Viscosity	not determined as it is considered not relevant for the characterization of the product	
Explosive properties	not determined as it is considered not relevant for the characterization of the product	

Physical and chemical properties	Value	Determination method
Oxidising properties	not determined as it is considered not relevant for the characterization of the product	

## 9.2. Other information

No data available.

## 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 sources and the provisions of 10.3

### 10.5. Incompatible materials

Reducing agents. Alkalis. Metals. Combustible materials.

### 10.6. Hazardous decomposition products

It does not decompose when used for its intended uses.

## SECTION 11. Toxicological information

### 11.1. Information on toxicological effects

ATE(mix) oral = ∞  
ATE(mix) dermal = ∞  
ATE(mix) inhal = 20,7 mg/l/4 h

(a) acute toxicity: Nitric acid: Ingestion - LD50 rat (mg / kg / 24h bw): nd  
Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): nd  
Inhalation - LD50 rat (mg / l / 4h): > 2.65  
Orthophosphoric acid: Ingestion-rat LD50 (mg/kg/bw 12h): 2600

Skin contact-LC50 rat/coniglio (mg/kg/bw 12h): 2740

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

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

Nitric acid: Corrosive

Orthophosphoric acid: Corrosive

Nitric acid: 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.

Nitric acid: Corrosive

Orthophosphoric acid: Corrosive

Nitric acid: irritating

Orthophosphoric acid: Irritating

(d) respiratory or skin sensitization: Nitric acid: Not available

Orthophosphoric acid: Not available

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

Orthophosphoric acid: Non-mutagenic

(f) carcinogenicity: Nitric acid: Non-conclusive data

Orthophosphoric acid: Non-carcinogenic

(g) reproductive toxicity: Nitric acid: Non-toxic for reproduction

Orthophosphoric acid: Non-toxic for reproduction

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

Orthophosphoric acid: Not available

(i) specific target organ toxicity (STOT) repeated exposure Nitric acid: Not available

Orthophosphoric acid: Not available

(j) aspiration hazard: Nitric acid: Not available

Orthophosphoric acid: Not available

### 11.2. Information on other hazards

No data available.

## SECTION 12. Ecological information

### 12.1. Toxicity

=====

Related to contained substances:

Nitric acid:

Acute toxicity - LC50 fish (mg / l / 96h): 4650

Acute toxicity - EC50 crustaceans (mg / l / 48h): Median lethal pH (48h) 4.4-4.7 for Ceriodaphnia dubia (US EPA guideline). This study shows that the pH rather than the anion (nitrate) is causing the toxic effects in daphnids. This is confirmed by two additional studies with sodium nitrate (24h EC50 8609 mg / L for Daphnia magna, similar to OECD TG 202) and potassium nitrate (48h EC50 490 mg / L for Daphnia magna, no guideline followed). The read-across rationale can be found in the category approach document in Section 13 of IUCLID and is fully incorporated in the CSR.

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Acute toxicity ErC50 algae (mg / l / 72-96h): nd  
C(E)L50 (mg/l) = 4650

Orthophosphoric acid:  
Endpoint: LC50-species: Fish = 75.1 mg/l-h Duration: 96  
Endpoint: EC50-species: Daphnia magna > 100 mg/l-h Duration: 48  
Endpoint: EC50-species: Algae > 100 mg/l-h Duration: 72

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

### **12.2. Persistence and degradability**

=====  
Related to contained substances:  
Nitric acid:  
Not available

Orthophosphoric acid:  
Not readily biodegradable

### **12.3. Bioaccumulative potential**

=====  
Related to contained substances:  
Nitric acid:  
Not bioaccumilable

Orthophosphoric acid:  
Not bioaccumulative

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

=====  
Related to contained substances:  
Nitric acid:  
Not available

Orthophosphoric acid:  
Not available

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

No PBT/vPvB ingredient is present

### **12.6. Endocrine disrupting properties**

No data available.

### 12.7. Other adverse effects

No adverse effects

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

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

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

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

Recover if possible. Operate according to local or national regulations

## SECTION 14. Transport information

### 14.1. UN number

ADR/RID/IMDG/ICAO-IATA: 3264

If subject to the following characteristics is ADR exempt:

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

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



### 14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO INORGANICO CORROSIVO, ACIDO, N.A.S. (Acido ortofosforico e Acido nitrico in miscela)

ADR/RID/IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Orthophosphoric acid and Nitric acid in mixture)

ICAO-IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Orthophosphoric acid and Nitric 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 : 1 L

IMDG - EmS : F-A, S-B

### 14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: II

### 14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is not environmentally hazardous

IMDG: Marine polluting agent : No

### 14.6. Special precautions for user

The transport must be carried out by authorized vehicles for the transport of dangerous goods in accordance with the requirements of the applicable Edition of the agreement A.D.R. and national provisions. The transport must be carried out in the original packaging and in packages that are made from materials resistant to content and not likely to generate with this dangerous reactions. The process of loading and unloading of dangerous goods have received adequate training on the risks presented by prepared and on possible procedures to be taken in the event of emergency

situations

#### **14.7. 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  
Reg (UE) 528/2012: see.to 2.2

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

#### **15.2. Chemical safety assessment**

No chemical safety assessment was carried out by the supplier

### **SECTION 16. Other information**

#### **16.1. Other information**

Points modified from the previous revision: 2.1 Classification of the mixture 2.2. Label elements

Description of hazard statements set out in paragraph 3

H272 = May intensify fire; oxidiser.  
H290 = May be corrosive to metals.  
H314 = Causes severe skin burns and eye damage.  
H331 = Toxic if inhaled.  
H318 = Causes serious eye damage.

Classification based on data of all mixture components

Main normative references:

Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.  
Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.  
Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.  
Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)  
Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.  
Regulation (UE) 528/2012 (Biocides) et seq.

Procedure used to classify under CLP mixture (Reg . EC 1272/2008):

Physical hazards: On the basis of experimental data

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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 Oxygen 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: 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 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: classification variation, exposure scenario updating and attached working instruction tabel. Reg878 updating

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

### Additional information depending on product composition

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

### Disclaimer

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

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

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

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**SUMI****Safe Use of Mixtures Information****AISE\_SUMI\_IS\_8b\_1**

Version 1.1, August 2018

***Transfer and dilution of concentrated product by using dedicated dosing system***

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

**General description of the process covered**

This SUMI applies to industrial uses where products are transferred to or diluted in a dedicated dosing system. This Safe Use Information is based on the **AISE\_SWED\_IS\_8b\_1\_L** and **AISE\_SWED\_IS\_8b\_1\_S**

**Operational Conditions**

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

**Risk Management Measures**

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

### Additional good practice advice

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

### Additional information depending on product composition

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

### Disclaimer

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

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**SUMI****Safe Use of Mixtures Information****AISE\_SUMI\_IS\_13\_3\_G***Version 1.1, August 2018****Industrial uses; Treatment of articles by dipping or pouring***

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

**General description of the process covered**

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

**Operational Conditions**

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

**Risk Management Measures**

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

### Additional good practice advice

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

### Additional information depending on product composition

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

#### Disclaimer

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

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# WORKING ISTRUCTION TABLE



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

Attached to MSDS rel#7 del 03/03/21

Use description	Use in batch and other process (synthesis) where opportunity for exposure arises [PROC4]; Transfer of substance or mixture (charging and discharging) at dedicated facilities [PROC8b]; Treatment of articles by dipping and pouring [PROC13]
Product name	<b>ACID N28</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. EUH071 - Corrosive to the respiratory tract.
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (5%) the product is classified: H314 - Causes severe skin burns and eye damage. H318 - Causes serious eye damage. EUH071 - Corrosive to the respiratory tract.
Handling of the product (100%)	Avoid contact and inhalation of vapors Wear protective gloves/protective clothing/eye protection/face protection. At work do not eat or drink.
Handling of the diluted product	Avoid contact and inhalation of vapors Wear protective gloves/protective clothing/eye protection/face protection. At work do not eat or drink.
DPI required concentrated product (racking, concentrated use, spillage...)	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).
Diluted product	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).

<p>In case of emergency (accidents involving exposure to the product)</p>	<p>Immediately inform the customer.          Immediately inform the employer.          Contact Poisons Centres tel. number in 1.4 section of the MSDS</p>
<p>Accidental release large quantities measures: concentrated product</p>	<p>Wear gloves,mask, glasses and protective clothing (for specifications refer to section 8.2 . SDS). Possibly absorb it with inert materia or sucked it.          After wiping up, wash with water the area and materials involved</p>
<p>Diluted product</p>	<p>Wear gloves,mask, glasses and protective clothing (for specifications refer to section 8.2 . SDS). Possibly absorb it with inert materia or sucked it.          After wiping up, wash with water the area and materials involved</p>
<p>Storage of the product</p>	<p>Keep in original container closed tightly. Do not store in open or unlabelled containers.          Keep containers upright and safe by avoiding the possibility of falls or collisions.          Store in a cool and dry place, away from heat sources and direct exposure to sunlight.</p>
<p>In case of accidents, emergency or fire</p>	<p>Immediately inform the customer.          Follow company emergency instruction.</p>