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

1.1. Product identifier

Product name : CELON
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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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. 1B, Eye Dam. 1

Hazard statement Code(s):
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.

The product can be corrosive to metals
Corrosive product: causes severe skin burns and eye damage.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

2.2. Label elements

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

Pictogram, Signal Word Code(s):
GHS05 - Danger

Hazard statement Code(s):
H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:
Prevention

P260 - Do not breathe 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

Contains (Reg.EC 648/2004):
< 5% cationic surfactants, 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
Orthophosphoric acidB	>= 25 < 50%	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, H319 10<= %C <25;	015-011-00-6	7664-38-2	231-633-2	01-2119485924-24-XXXX
Alkoxylated fatty alcohol	>= 0,1 < 1%	Skin Irrit. 2, H315; Aquatic Acute 1, H400; Aquatic Chronic 3, H412 Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1		120313-48-6		
Dimethyldiothylamine chloride	>= 0,1 < 1%	Acute Tox. 3, H301; Acute Tox. 1, H310; Skin Corr. 1B, H314; Eye Dam. 1, H318;		5538-94-3	226-901-0	01-2120767055-53-XXXX

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute toxicity M-factor = 10 Chronic toxicity M-factor = 1 ATE oral = 238,0 mg/kg ATE dermal = 191,0 mg/kg				
Ethanol substance for which there are Community workplace exposure limits	< 0,1%	Flam. Liq. 2, H225; Eye Irrit. 2, H319 Limits: Eye Irrit. 2, H319 %C >=50;	603-002-00-5	64-17-5	200-578-6	01-2119457610-43-XXXX

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

Ingestion 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.

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

If you feel unwell, consult a physician immediately and if possible show this MSDS.

Symptomatic treatment

SECTION 5. Firefighting measures

5.1. Extinguishing media

Recommended extinguishing media: Nebulized water, CO2, 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. The sprayed water can be used to protect the people involved in extinguishing It is also recommended to use self-contained breathing apparatus, especially if you work in closed and poorly ventilated places Cool the containers with water jets

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.

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 care. Store in a well ventilated place and away from heat sources (7 ° C-30 ° C) in the original container, tightly closed

Manufacture of food products:
Handle with care. Store in a well-ventilated place away from heat sources. (7 ° C-30 ° C)

See the annex exposure scenario.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

==========
Related to contained substances:
Orthophosphoric acid:
Limit value – Eight hours
(ppm)/(mg/m3)
Argentina x/1
Australia: x/1
Austria: x/1
Belgium : x/1
Canada-Ontario: x/1
Canada-Quèbec: 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/m3)
Argentina: x/3
Australia: x/x
Austria: x/2
Belgium : x/2
Canada-Ontario: x/3
Canada-Quèbec: 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

Ethanol:
Limit value – Eight hours
(ppm)/(mg/m3)
Australia: 1000/1880
Austria: 1000/1900
Belgium: 1000/1907
Canada-Ontario: x/x
Canada-Quèbec: 1000/1880
Denmark: 1000/1900
Finland: 1000/1900
France: 1000/1900
Germany (AGS): 500/960
Germany (DFG): 500/960
Hungary: x/1900
Ireland: x/x
Latvia: x/1000
New Zealand: 1000/1880
Poland: x/1900
Singapore: 1000/1880
South Korea: 1000/1900
Spain: x/x
Sweden: 500/1000
Switzerland: 500/960
The Netherlands: x/260
USA – NIOSH: 1000/1900
USA – OSHA: 1000/1900
United Kingdom: 1000/1920

Limit Value – Short term
(ppm)/(mg/m3)
Australia: x/x
Austria: 2000/3800
Belgium: x/x
Canada-Ontario: 1000/x
Canada-Quèbec: x/x
Denmark: 2000/3800
Finland: 1300(1)/2500(1)
France: 5000/9500
Germany (AGS): 1000(1)/1920(1)
Germany (DFG): 1000(1)/1920(1)
Hungary: x/7600
Ireland: 1000(1)/x
Latvia: x/x
New Zealand: x/x
Poland: x/x
Singapore: x/x
South Korea: x/x
Spain: 1000/1910
Sweden: 1000(1)/1900(1)
Switzerland: 1000/1920
The Netherlands:x/1900
USA – NIOSH: x/x
USA – OSHA: x/x
United Kingdom: x/x

Remarks

Finland: (1) 15 minutes average value
Germany (AGS): (1) 15 minutes average value
Germany (DFG): (1) 15 minutes average value
Ireland: (1) 15 minutes reference period
Sweden: (1) Short – term value, 15 minutes average value

- Substance: Orthophosphoric acid
DNEL
Local effects Long term Workers inhalation = 1 (mg/m3)
Local effects Long term Consumers inhalation = 0,73 (mg/m3)
Local effects Short term Workers inhalation = 2 (mg/m3)

- Substance: Dimethyldiothylamine chloride
DNEL
Systemic effects Long term Workers inhalation = 18,79 (mg/m3)
Systemic effects Long term Workers dermal = 2,67 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 7,36 (mg/m3)
Systemic effects Long term Consumers dermal = 1,6 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 1,6 (mg/kg bw/day)
Systemic effects Short term Workers inhalation = 18,79 (mg/m3)
Systemic effects Short term Consumers inhalation = 7,36 (mg/m3)
Systemic effects Short term Consumers oral = 1,6 (mg/kg bw/day)
PNEC
Sweet water = 0,001 (mg/l)
Sea water = 0,0001 (mg/l)
STP = 0,5 (mg/l)

- Substance: Ethanol
DNEL
Systemic effects Long term Workers inhalation = 950 (mg/m3)
Systemic effects Long term Workers dermal = 343 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 114 (mg/m3)
Systemic effects Long term Consumers dermal = 206 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 87 (mg/kg bw/day)
Local effects Long term Consumers inhalation = 950 (mg/m3)
Local effects Short term Workers inhalation = 1900 (mg/m3)
PNEC
Sweet water = 0,96 (mg/l)
sediment Sweet water = 3,6 (mg/kg/sediment)
Sea water = 0,79 (mg/l)
sediment Sea water = 2,9 (mg/kg/sediment)
intermittent emissions = 2,75 (mg/l)
STP = 580 (mg/l)
ground = 0,63 (mg/kg ground)

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 and inorganic vapors - Grey , Class 3 , B (EN 405) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic

(d) Thermal hazards
No hazard to report

Environmental exposure controls:
Use according to good working practices and avoid to disperse the product into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	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	<2.0 (20 ° C); <2.0 (20 ° C; 5% sol.)	
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	ASTM D92
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	

Physical and chemical properties	Value	Determination method
Relative density	1.30 ± 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	
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
Can be corrosive to metals.

10.2. Chemical stability

No dangerous reactions if handled and stored according to the provisions

10.3. Possibility of hazardous reactions

Possible dangerous reactions with: alkalis, alcohols, amines, metals.

In contact with metals it produces hydrogen gas, an extremely flammable gas which produces explosive mixtures with air. Never pour water on these substances.

10.4. Conditions to avoid

Direct heat sources and the provisions of 10.3

10.5. Incompatible materials

Alkali
Metals
Amines
Alcohols.

10.6. Hazardous decomposition products

As a consequence of thermal decomposition, dangerous products can be formed: phosphorus oxides.

SECTION 11. Toxicological information

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

ATE(mix) oral = 101.709,4 mg/kg
ATE(mix) dermal = 81.623,9 mg/kg

(a) acute toxicity: 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.
Alkoxylated fatty alcohol: Ingestion - LD50 rat (mg / kg / 24h bw):> 2000
Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): na
Inhalation - LD50 rat (mg / l / 4h): na
Dimethyldiothylamine chloride: Ingestion - LD50 rat (mg / kg / 24h bw): 238
Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): 191
Inhalation - LD50 rat (mg / l / 4h): na
Ethanol: Ingestion - LD50 rat (mg / kg / 24h bw): 6200
Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): na
Inhalation - LD50 rat (mg / l / 4h):> 50
(b) skincorrosion/irritation: Corrosive product: causes severe skin burns and eye damage.
Orthophosphoric acid: Corrosive
Alkoxylated fatty alcohol: Not corrosive
Dimethyldiothylamine chloride: Corrosive
Ethanol: Not corrosive
Orthophosphoric acid: Irritating
Alkoxylated fatty alcohol: Irritating
Dimethyldiothylamine chloride: Species: Rabbit Exposure time: 3 min Assessment: Irritating to skin Method: OECD Test Guideline 404
Ethanol: Not 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.
Orthophosphoric acid: Corrosive
Alkoxylated fatty alcohol: Not corrosive
Dimethyldiothylamine chloride: Species: Rabbit Exposure time: 1 s Method: OECD Test Guideline 405 Result: Risk of serious damage to eyes. GLP: yes Test substance: Information given is based on data obtained from similar substances.
Ethanol: Non-corrosive
Orthophosphoric acid: Irritating

Alkoxylated fatty alcohol: Not irritating
Dimethyldiothylamine chloride: Species: Rabbit Exposure time: 1 s Method: OECD Test Guideline 405 Result: Risk of serious damage to eyes. GLP: yes Test substance: Information given is based on data obtained from similar substances.
Ethanol: Irritating
(d) respiratoryorskinsensitisation: Orthophosphoric acid: Not available
Alkoxylated fatty alcohol: Not sensitizing
Dimethyldiothylamine chloride: no data available
Ethanol: Not sensitizing
(e) germ cell mutagenicity: Orthophosphoric acid: Non-mutagenic
Alkoxylated fatty alcohol: Not mutagenic
Dimethyldiothylamine chloride: Test Type: Ames test Species: Salmonella typhimurium Metabolic activation: yes Method: OECD Test Guideline 471 Result: not mutagenic GLP: yes Test substance: Information given is based on data obtained from substances similar.
Ethanol: Not mutagenic
(f) carcinogenicity: Orthophosphoric acid: Non-carcinogenic
Alkoxylated fatty alcohol: Not carcinogenic
Dimethyldiothylamine chloride: Species: Mouse, (male and female) Application Route: Dietary Dose: 0-100-500-1000 ppm Frequency of Treatment: Daily NOAEL: 76.3 mg / kg bw / day Method: Test Guideline 451 OECD GLP: yes Substance to be tested: Information given is based on data obtained from similar substances.
Ethanol: Not carcinogenic
(g) eproductivetoxicity: Orthophosphoric acid: Non-toxic for reproduction
Alkoxylated fatty alcohol: Non toxic
Dimethyldiothylamine chloride: Unavailable
Ethanol: Non-toxic for reproduction
(h) specific target organ toxicity (STOT) single exposure: Orthophosphoric acid: Not available
Alkoxylated fatty alcohol: Non toxic
Dimethyldiothylamine chloride: Unavailable
Ethanol: Unavailable
(i) specific target organ toxicity (STOT) repeated exposureOrthophosphoric acid: Not available
Alkoxylated fatty alcohol: Non toxic
Dimethyldiothylamine chloride: Species: Rat, male and female NOAEL: 37 mg / kg Application Route: Dietary Exposure time: 13 Weeks Number of exposures: Daily Dose: 0-100-300-600-1000-3000 ppm Method: Guidelines 408 for the OECD Test Substance to be tested: Information given is based on data obtained from similar substances.
Ethanol: Unavailable
(j) aspiration hazard: Orthophosphoric acid: Not available
Dimethyldiothylamine chloride: Species: Rat, male and female Strain: Sprague-Dawley Application Route: Ingestion Dose: 0-300-750-1500 ppm Method: OECD Test Guideline 416 Result: No effect on fertility and on early embryonic development. GLP: yes Remarks: Information given is based on data obtained from similar substances.
Ethanol: Unavailable

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

==========
Related to contained substances:
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

Alkoxylated fatty alcohol:

Acute toxicity - fish LC50 (mg / l / 96h):> 1 - <10 mg / l, Leuciscus idus
Acute toxicity - crustaceans EC50 (mg / l / 48h): 1 mg / l, Daphnia magna
Acute toxicity algae ErC50 (mg / l / 72-96h):> 0.1 - <1 mg / l, Scenedesmus subspicatus Chronic toxicity - NOEC fish (mg / l): na
Chronic toxicity - NOEC crustaceans (mg / l):> 0.1 - < 1 mg / l,
Chronic toxicity algae NOEC (mg / l): na

Dimethyldiothylamine chloride:
Acute toxicity - fish LC50 (mg / l / 96h): 0.35
Acute toxicity - crustaceans EC50 (mg / l / 48h): 0.1
Acute toxicity algae ErC50 (mg / l / 72-96h): 0.122
Chronic toxicity - fish NOEC (mg / l): 0.018
Chronic toxicity - crustaceans NOEC (mg / l): 0.027
Chronic toxicity algae NOEC (mg / l): 0.01
Toxicity for micro-organisms - activated sludge EC50 (mg / l) 22,0
Toxicity to micro-organisms - activated sludge NOEC (mg / l) 5,0
Acute toxicity M-factor = 10

Ethanol:
Acute toxicity - fish LC50 (mg / l / 96h): 13400-15100
Acute toxicity - crustaceans EC50 (mg / l / 48h): 857
Chronic toxicity - fish NOEC (mg / l):> 1
Chronic toxicity - crustaceans NOEC (mg / l):> 10
Chronic NOEC algae toxicity (mg / l): 3200

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

12.2. Persistence and degradability

==========
Related to contained substances:
Orthophosphoric acid:
Not readily biodegradable

Alkoxylated fatty alcohol:
Easily biodegradable
Disposal considerations:> = 90% active substance with bismuth (mod. OECD 301E)> 60% CO2 formation of the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69 / EEC, C.4- C) Easily biodegradable (according to OECD criteria).

Dimethyldiothylamine chloride:
Easily biodegradable

Ethanol:
Easily biodegradable

12.3. Bioaccumulative potential

==========
Related to contained substances:
Orthophosphoric acid:
Not bioaccumulative

Alkoxylated fatty alcohol:
na

Dimethyldiothylamine chloride:
Unavailable.

Ethanol:
Unavailable

12.4. Mobility in soil

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

Alkoxylated fatty alcohol:
na

Dimethyldiothylamine chloride:
Unavailable

Ethanol:
Henry Law constant (H): 0.461 Pa * m3 / mol log Koc = -0.43

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 (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 1 L per package 30 Kg
Inner packaging placed in skrink-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 in miscela)
ADR/RID/IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Orthophosphoric acid in mixture)
ICAO-IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Orthophosphoric 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. Maritime transport in bulk according to IMO instruments

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

Restrictions relating to the product or contained substances (All. XVII Reg. EC 1907/2006): not applicable
Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC in a proportion ≥ 0.1%.
Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC in a proportion ≥ 0.1%.
Reg. EC 648/04: see 2.2

Reg. (EU) n. 1169/2011: see 2.2
Reg (UE) 528/2012: see.to 2.2
REGULATION (EU) No 1357/2014 - waste:HP8 - Corrosive,HP14 - Ecotoxic

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: 3.2 information on ingredients 4.3. Indication of any immediate medical attention and special treatment needed, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 10.1. Reactivity, 10.2. Chemical stability, 10.3. Possibility of hazardous reactions, 10.4. Conditions to avoid, 10.5. Incompatible materials, 10.6. Hazardous decomposition products, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 12.6. Endocrine disrupting properties 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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.
H315 = Causes skin irritation.
H400 = Very toxic to aquatic life.
H412 = Harmful to aquatic life with long lasting effects.
H301 = Toxic if swallowed.
H310 = Fatal in contact with skin.
H410 = Very toxic to aquatic life with long lasting effects.
H225 = Highly flammable liquid and vapour.
H319 = Causes serious eye irritation.

Classification based on data of all mixture components

Main normative references:
Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.
Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.
Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.
Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)
Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.
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
H314 Skin. Corr. 1B: 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: 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 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: sec. 2, issued in according with Reg. (UE) 878/20

SUMI

Safe Use of Mixtures Information

AISE_SUMI_IS_4_2

Version 1.1, August 2018

Industrial uses; Automated task; Semi-automated task; Dedicated equipment

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

General description of the process covered

The SUMI applies to industrial uses where products are used in closed process where opportunity for exposure arises. This Safe Use Information is based on the **AISE_SWED_IS_4_2**.

Operational Conditions

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

Risk Management Measures

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

Additional good practice advice

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

Risk Management Measures

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

Additional good practice advice

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

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

Risk Management Measures

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

Additional good practice advice

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

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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.
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WORKING ISTRUCTION TABLE

IMPROVEMENT THROUGH BIOTECHNOLOGY

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#10 del 11/09/21

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	**CELON**
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: 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)	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, 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,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
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.