

**SECTION 1. Identification of the substance/mixture and of the company/enterprise****1.1. Product identifier**

Product name : ATCAL

Product code: refer to sales department

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

Descaling agent for ACT.O ovens

Sectors of use:

Industrial Manufacturing[SU3], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

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 nondedicated facilities[PROC8A], Transfer of substance or mixture (charging and discharging) at dedicated facilities[PROC8B]

Not recommended uses

Do not use for purposes other than those listed

**1.3. Details of the supplier of the safety data sheet**

Distributore esclusivo/Exclusive supplier:

ANGELO PO Grandi Cucine

41012 Carpi (Italy) S/S Romana Sud, 90

Tel. +39.059.639411 - Fax +39.059.642499

e-mail: angelopo@angelopo.it http: www.angelopo.it

**1.4. Emergency telephone number**

Centralino/Switchboard +39.030.2307.1 - (h 8.30-12.00 13.30-18.00 GMT+1; Lingua/Language: Italiano, English)

**SECTION 2. Hazards identification****2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS05

Hazard Class and Category Code(s):

Met. Corr. 1, Skin Corr. 1, Eye Dam. 1

Hazard statement Code(s):

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

The product can be corrosive to metals

Corrosive product: causes severe skin burns and eye damage.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

## 2.2. Label elements

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

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



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

Supplemental Hazard statement Code(s):  
not applicable

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% 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 acid (B)	>= 9 < 30%	Met. Corr. 1, H290; Acute Tox. 4, H302; Skin Corr. 1B, H314;	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
		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 = 1.530,0 mg/kg				
Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO)	>= 1 < 3%	Acute Tox. 4, H302; Eye Dam. 1, H318 ATE oral = 500,0 mg/kg		78330-20-8		Polymer

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

**EYES:** Remove any contact lenses. Wash immediately and abundantly with water for at least 30/60 minutes, opening the eyelids well. Consult a physician immediately.

**SKIN:** Take off contaminated clothing. Take a shower immediately. Consult a physician immediately.

**INGESTION:** Give as much water to drink as possible. Consult a physician immediately. Do not induce vomiting unless expressly authorized by your doctor.

**INHALATION:** Call a doctor immediately. Take the person out into fresh air, away from the accident site. If breathing stops, give artificial respiration. Take appropriate precautions for the rescuer

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

Ingestion can cause chemical burns in the mouth and throat. Contact with skin can cause burns. In contact with eyes it causes very strong irritation, including redness and tearing.

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

Symptomatic treatment

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

**SUITABLE EXTINGUISHING MEDIA** The extinguishing media are the traditional ones: carbon dioxide, foam, powder and nebulized water.

**UNSUITABLE EXTINGUISHING MEDIA** None in particular.

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

Avoid breathing combustion products

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous to health. Always wear full fire protection equipment. Collect the extinguishing water which must not be discharged into the sewers. Dispose of contaminated water used for extinguishing and the residue of the fire according to current regulations.

#### EQUIPMENT

Normal clothing for firefighting, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and boots for Firefighters (HO A29 or A30).

## SECTION 6. Accidental release measures

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

#### 6.1.1 For non-emergency personnel:

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

#### 6.1.2 For emergency responders:

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

### 6.2. Environmental precautions

Contain spills 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.  
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 clean, dry and ventilated place, away from heat sources and direct sunlight. Keep the container tightly closed

Public domain (administration, education, entertainment, services, craftsmen):

Handle with Care. Store in a clean, dry and ventilated place, away from heat sources and direct sunlight. Keep the container tightly closed

See the annex exposure scenario.

**SECTION 8. Exposure controls/personal protection****8.1. Control parameters**

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Related to contained substances:

Orthophosphoric acid:

Limit value – Eight hours

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

Austria: x/x

Belgium: x/x

Denmark: x/x

France: 0,2/1

Germany AGW: x/2 INALAB

Germany MAK: x/2 INALAB

Greek: x/1

Hungary: x/1

Italy: x/1

Japan (JSOH): x/x

Latvia: x/1

Poland: x/x

Romania: x/1

Spain: x/1

Slovakia: x/1

Sweden: x/x

Switzerland: x/x

USA – OSHA: x/x

UK: x/1

UE-OEL: x/1

LTV-ACGIH: x/1

Limit Value – Short Term

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

Austria: x/x  
Belgium: x/x  
Denmark: x/x  
France: 0,5/2  
Germany AGW: x/4 (C) INALAB  
Germany MAK: x/4 INALAB  
Greek: x/3  
Hungary: x/2  
Italy: x/2  
Japan (JSOH): x/x  
Latvia: x/2  
Poland: x/x  
Romania: x/2  
Spain: x/2  
Slovakia: x/2  
Sweden: x/x  
Switzerland: x/x  
USA – OSHA: x/x  
UK: x/2  
UE-OEL: x/2  
LTV-ACGIH: x/2

- Substance: Orthophosphoric acid  
DNEL

Systemic effects Long term Workers inhalation = 10,7 (mg/m<sup>3</sup>)  
Systemic effects Long term Consumers inhalation = 4,57 (mg/m<sup>3</sup>)  
Systemic effects Long term Consumers oral = 0,1 (mg/kg bw/day)  
Local effects Long term Workers inhalation = 1 (mg/m<sup>3</sup>)  
Local effects Long term Consumers inhalation = 0,36 (mg/m<sup>3</sup>)  
Local effects Short term Workers inhalation = 2 (mg/m<sup>3</sup>)

## 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)

Public domain (administration, education, entertainment, services, craftsmen):

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.

During manual operations, in the event of insufficient ventilation, use a mask with filters for inorganic vapors - Grey , Class 3 , B (UNI EN 405) unless otherwise specified by the employer and/or environmental hygiene investigations. environmental hygiene investigations. Not necessary if aeriform concentrations are kept below the exposure limit. exposure limit. Use certified respiratory protective equipment complying with EU requirements (89/656/EEC, 245/2016 EU) or equivalent if respiratory risks cannot be prevented or sufficiently limited by collective protection or by measures, methods or procedures of work organisation

(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 considered not relevant for the characterization of the product	
Odour threshold	not determined as considered not relevant for the characterization of the product	
pH	1,5 ± 0,5 (20 ° C)	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flash point	not determined as considered not relevant for the characterization of the product	
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	1,15 ± 0,05 (20 ° C)	
Solubility	in water	
Water solubility	miscible in all proportions	
Partition coefficient: n-octanol/water	not determined as considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product	
Decomposition temperature	not determined as considered not relevant for the characterization of the product	

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

## 9.2. Other information

No data available.

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use. Avoid contact with bases  
ORTHOPHOSPHORIC ACID: decomposes at temperatures above 200 ° C / 392 ° F.

### 10.2. Chemical stability

The product is stable under normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

Under normal conditions of use and storage no dangerous reactions are foreseeable. PHOSPHORIC ACID: risk of explosion on contact with: nitromethane. Can react dangerously with: alkali, sodium boron hydride

### 10.4. Conditions to avoid

None in particular. However, follow the usual precautions against chemicals.

### 10.5. Incompatible materials

PHOSPHORIC ACID: incompatible with: metals, strong alkalis, aldehydes, organic sulphides, peroxides. 10.6. Products

### 10.6. Hazardous decomposition products

In case of involvement in fire, highly corrosive and irritating fumes may develop for the respiratory tract, eyes and skin (phosphorus oxides, carbon monoxide, carbon dioxide)



## SECTION 11. Toxicological information

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

ATE(mix) oral = >2000

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: Orthophosphoric acid: LD50 (Oral) 1530 mg / kg rat

LD50 (Cutaneous) 2740 mg / kg rabbit

LC50 (Inhalation) > 0.85 mg / l / 1h rat

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Ingestion-rat LD50 (mg/kg/bw 24h): 300-2000

Skin contact-LC50 rat/coniglio (mg/kg/bw 24h): n.d.

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

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

Orthophosphoric acid: Corrosive

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Non-corrosive

Orthophosphoric acid: Irritating

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Non-irritating

(c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage. - If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

Orthophosphoric acid: Corrosive

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Corrosive

Orthophosphoric acid: Irritating

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Irritating

(d) respiratory or skin sensitisation: Orthophosphoric acid: Not available

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Non-sensitizing

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

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Non-mutagenic

(f) carcinogenicity: Orthophosphoric acid: Not carcinogenic

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Non-carcinogenic

(g) reproductive toxicity: Orthophosphoric acid: Not toxic for reproduction

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Non-toxic for reproduction

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

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Not available

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

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Not available

(j) aspiration hazard: Orthophosphoric acid: Not available

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO): Not available

### 11.2. Information on other hazards

No data available.

## SECTION 12. Ecological information

### 12.1. Toxicity

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Related to contained substances:

Orthophosphoric acid:

LC50 - Species: Pisces = n.a.

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EC50 - Species: Daphnia magna n.a. - Duration h: 48

EC50 - Species: Algae n.a. - Duration h: 72

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO):

Acute toxicity - fish LC50 (mg / l / 96h):> 100

Acute toxicity - crustaceans EC50 (mg / l / 48h):> 100

Acute toxicity - algae EC50 (mg / l / 72h):> 100

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

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

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

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

## 12.2. Persistence and degradability

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Related to contained substances:

Orthophosphoric acid:

Solubility in water> 850000 mg / l Degradability: data not available

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO):

Non persistent and biodegradable OECD 301 / F 28g> 70%

## 12.3. Bioaccumulative potential

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Related to contained substances:

Orthophosphoric acid:

Not bioaccumulative

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO):

Not bioaccumulative

## 12.4. Mobility in soil

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Related to contained substances:

Orthophosphoric acid:

Not available

Alcohols, C9-11-iso-, C10-rich, ethoxylated (>5 - <=10 EO):

Not applicable

## 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 or ID number**

ADR/RID/IMDG/ICAO-IATA: 1805

If subject to the following characteristics is ADR exempt:

Combination packagings: per inner packaging 5 L per package 30 Kg

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

**14.2. UN proper shipping name**

ADR/RID/IMDG: ACIDO FOSFORICO IN SOLUZIONE

ADR/RID/IMDG: PHOSPHORIC ACID, SOLUTION

ICAO-IATA: PHOSPHORIC ACID, SOLUTION

**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 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  $\geq 0.1\%$ .  
Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC in a proportion  $\geq 0.1\%$ .

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

#### 15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

### SECTION 16. Other information

#### 16.1. Other information

Points modified compared to previous release: 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 5.3. Advice for firefighters, 7.1. Precautions for safe handling, 8.1. Control parameters, 8.2. Exposure controls, 10.1. Reactivity, 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, 13.1. Waste treatment methods, 14.1. UN number or ID number, 14.2. UN proper shipping name, 14.3. Transport hazard class(es), 14.4. Packing group, 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.

H302 = Harmful if swallowed.

H314 = Causes severe skin burns and eye damage.

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): substantially similar mixture/ bridging principle

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 Estimati

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 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

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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, updating to reg.(UE) 878/2020, Transport information variation

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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

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

### Additional information depending on product composition

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

### Disclaimer

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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\_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

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

### Additional information depending on product composition

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

### Disclaimer

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**SUMI****Safe Use of Mixtures Information****AISE\_SUMI\_PW\_4\_1***Version 1.1, August 2018****Professional uses; Semi-closed 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**

The SUMI applies to professional uses where products are used in closed process where opportunity for exposure arises. This Safe Use Information is based on the **AISE\_SWED\_PW\_4\_1**.

**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>	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

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

### Additional information depending on product composition

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

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**SUMI****Safe Use of Mixtures Information****AISE\_SUMI\_PW\_8a\_1\_G***Version 1.1, August 2018****Transfer of product to a container (bottle/bucket/machine)***

*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 professional uses where the product is transferred to or diluted in a container, such as a dispenser, bottle or bucket. Safe Use Information is based on the **AISE\_SWED\_PW\_8a\_1\_L** and **AISE\_SWED\_PW\_8a\_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 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

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

### Additional information depending on product composition

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

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