

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.05.2020


Version number 2

Revision: 25.05.2020

### SECTION 1: Identification of the substance/mixture and of the company/ undertaking

- **1.1 Product identifier**
  - **Trade name: ACA270**
  - **Article number:** 96802051594
  - **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Water treatment
  - **1.3 Details of the supplier of the safety data sheet**
  - **Supplier:**  
Alfa Laval Copenhagen A/S  
Maskinvej 5  
DK-2860 Soeborg  
Denmark  
info.dk@alfalaval.com  
Tel: +45 39 53 6000
  - **Further information obtainable from:**  
For further questions regarding the safety data sheet, please contact your local Alfa Laval Sales Company which you find at [www.alfalaval.com](http://www.alfalaval.com) or in section 16 "Other Information" in the end of the safety data sheet
  - **1.4 Emergency telephone number:**  
For immediate, life-threatening emergencies, call 999  
For health advice and information (24h) dial 111 (NHS direct).
- In Europe: Call 112 and ask for poison information.

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Met. Corr.1 H290 May be corrosive to metals.  
Eye Dam. 1 H318 Causes serious eye damage.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**  
  
GHS05
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
aluminum chloride, basic
- **Hazard statements**  
H290 May be corrosive to metals.  
H318 Causes serious eye damage.

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- **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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

P310 Immediately call a POISON CENTER/doctor.

- **Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.

- **2.3 Other hazards** No further relevant information available.

- **Results of PBT and vPvB assessment**

- **PBT:** The product is not, nor contains, a substance that is, PBT.

- **vPvB:** The product is not, nor contains a substance that is, vPvB.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 1327-41-9	aluminum chloride, basic	Met. Corr.1, H290; Eye Dam. 1, H318	25-50%
EINECS: 215-477-2			

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.

- **After inhalation:** Supply fresh air; consult doctor if symptoms persists.

- **After skin contact:**

Take off immediately all contaminated clothing.

Immediately wash with water and soap and rinse thoroughly.

If symptoms persist consult doctor.

- **After eye contact:**

Rinse cautiously with water for 20 minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a doctor immediately.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed**

Inhalation of mist may cause irritation to upper respiratory tract.

- **4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:**

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

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- **For safety reasons unsuitable extinguishing agents:** Not applicable.
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Hydrogen chloride (HCl)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.  
Do not breathe vapour.
- **6.2 Environmental precautions:**  
Send for recovery or disposal in suitable receptacles.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Do not breathe vapour.  
Avoid contact with skin and eyes.  
Eye wash bottle or emergency eye wash fountain must be found in the work place.  
When using do not eat, drink or smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a well-ventilated place. Keep container tightly closed.  
Store at -30 - 30 °C  
Unsuitable materials for containers:  
metals
- **Information about storage in one common storage facility:**  
Store away from oxidising agents.  
Store away from reducing agents.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)**  
Water treatment chemical

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### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:**

Use only in well-ventilated areas.

Eye wash bottle or emergency eye wash fountain must be found in the work place.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**CAS: 1327-41-9 aluminum chloride, basic**TVA | Long-term value: 2 mg/m<sup>3</sup>

- **DNELs**

**CAS: 1327-41-9 aluminum chloride, basic**

Oral	DNEL: Long term exposure systemic	1.8 mg/m <sup>3</sup> /day (Worker) Calculated for as Al.
Inhalative	DNEL: Long term exposure systemic	0.5 mg/kg/day (Worker) Calculated as AL.

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment.

Filter B-P2

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

Nitrile rubber, NBR

Neoprene gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Eye protection:**



Tightly sealed goggles

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- **Body protection:** Wear protective clothing.
- **Limitation and supervision of exposure into the environment**  
Do not allow to enter sewers/ surface or ground water.

### SECTION 9: Physical and chemical properties

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

##### · General Information

##### · Appearance:

Form:	Fluid
Colour:	Light yellow
· Odour:	Odourless
· Odour threshold:	Not determined.

· pH-value at 20 °C: >2

##### · Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100-120 °C
Crystallisation temperature / range:	-30 °C

· Flash point: Not applicable.

· Decomposition temperature: >200 °C

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

##### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Oxidising properties: Not applicable.

· Vapour pressure: Not determined.

· Density at 20 °C: 1.27 g/cm<sup>3</sup>

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water:

Easily soluble.

· Partition coefficient: n-octanol/water: Not determined.

##### · Viscosity:

Dynamic at 20 °C:	10-50 mPas
	Not determined.

Kinematic: Not determined.

· 9.2 Other information: No further relevant information available.

### SECTION 10: Stability and reactivity

· 10.1 Reactivity: Reacts with light alloys to form hydrogen.

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- **10.2 Chemical stability**  
The material is stable under recommended storage and handling conditions.
- **10.3 Possibility of hazardous reactions**  
Corrosive action on metals.  
Reacts with alkali (lyes).
- **10.4 Conditions to avoid**  
Avoid temperatures above 200 ° C without adequate ventilation.  
Do not store together with alkalis (caustic solutions).
- **10.5 Incompatible materials:**  
Store away from reducing agents.  
Store away from oxidising agents.
- **10.6 Hazardous decomposition products:** Hydrogen chloride (HCl)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**

CAS: 1327-41-9 aluminum chloride, basic

Oral	LD50	>2,000 mg/kg (Rat) Calculated as Al.
Dermal	LD50	>2,000 mg/kg (Rat)

Based on available data, the classification criteria are not met.

- **Primary irritant effect:**
- **Skin corrosion/irritation** Prolonged and / or repeated skin contact may cause irritation.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Acute effects (acute toxicity, irritation and corrosivity)**  
Inhalation of mist may cause irritation to upper respiratory tract.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

CAS: 1327-41-9 aluminum chloride, basic

EC50 (72 h)	14 mg/L (Algae) (OECD Test Guideline 201) Pseudokirchneriella subcapitata
EC50 (48 h)	98 mg/L (Daphnia) (OECD Test Guideline 202)
NOEC - No observed effect concentration	1 mg/l (Algae) (72 h) 40 mg/l (Daphnia) (48 h)

- **12.2 Persistence and degradability** Not applicable.

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- **12.3 Bioaccumulative potential** Not applicable.
- **12.4 Mobility in soil** Some mobility in soil can be expected
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** The product is not, nor contains, a substance that is, PBT.
- **vPvB:** The product is not, nor contains a substance that is, vPvB.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations


- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 03 00	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 99	wastes not otherwise specified

- **Uncleaned packaging:**
- **Recommendation:**  
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | UN3264  |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>                         | 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (aluminum chloride, basic)<br>CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (aluminum chloride, basic)   |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                       | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> |
| <ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | 8 Corrosive substances.<br>8<br>III   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> </ul>   | Not applicable.   |
| <ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> </ul> | Warning: Corrosive substances.<br>80<br>F-A,S-B   |

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· <b>Segregation groups</b>	Acids
· <b>Stowage Category</b>	A
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ALUMINUM CHLORIDE, BASIC), 8, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
EU Regulation (EC) no.1907/2006 (REACH)
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### LIMITATION OF LIABILITY

This document is only intended to be used as guidance as regards the risks of which we are aware that are associated with the product. Every individual who works with the product or in close proximity of it must receive suitable training. Individuals who come into contact with the product must be capable of using their own judgement as regards conditions or methods for handling, storing and using the product. Alfa Laval is not liable for demands, losses or damage of any kind that arise from flaws or deficiencies in this document or from using, handling, storing or disposing of the product unless it can be proven that Alfa Laval has acted in a grossly negligent manner. Beyond what has been agreed upon and specified in writing with Alfa Laval in the individual case, Alfa Laval makes no promises or assumes any liability, including but not limited to implicit

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guarantees regarding marketability or appropriateness in terms of both the information provided in this document and the product to which the information refers.

Please contact your local Alfa Laval Sales Company for further questions.

[www.alfalaval.com](http://www.alfalaval.com)

**Relevant phrases**

H290 May be corrosive to metals.

H318 Causes serious eye damage.

**Department issuing SDS:** Alfa Laval Corporate Standards & Regulatory Operations

**Contact:**

Please contact your local Alfa Laval Sales Company for further questions.

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**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
DNEL: Derived No-Effect Level (REACH)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Met. Corr. 1: Corrosive to metals – Category 1  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

· **\* Data compared to the previous version altered.**

GB