





## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** ALU STRONG  
**Other means of identification:**  
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Washing of vehicles.. For professional users only.  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
P.P.H.U. "ORION" Paweł Długosz  
Barycz 42 A  
95-082 Dobroń - Polska  
Phone: 793310770  
sales@orion-chemia.eu  
www.orion-chemia.eu
- 1.4 Emergency telephone number:** 112

## SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
Product classified regardless of its extreme pH.  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Acute Tox. 2: Acute toxicity on contact with skin, Category 2, H310  
Acute Tox. 3: Acute toxicity if swallowed, Category 3, H301  
Acute Tox. 4: Acute inhalation toxicity, Category 4, H332  
Eye Dam. 1: Serious eye damage, Category 1, H318  
Met. Corr. 1: Corrosive to metals, Category 1, H290  
Skin Corr. 1B: Skin corrosion, Category 1B, H314
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
**Danger**
-  
- Hazard statements:**  
Acute Tox. 2: H310 - Fatal in contact with skin.  
Acute Tox. 3: H301 - Toxic if swallowed.  
Acute Tox. 4: H332 - Harmful if inhaled.  
Met. Corr. 1: H290 - May be corrosive to metals.  
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
- Precautionary statements:**  
P234: Keep only in original packaging.  
P280: Wear protective gloves/protective clothing/eye protection/protective footwear.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302+P352: IF ON SKIN: Wash with plenty of water.  
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.  
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.  
**UFI:** PP20-N068-9008-AMNX
- 2.3 Other hazards:**

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**ALU STRONG**

**SECTION 2: HAZARDS IDENTIFICATION (continued)**

Product fails to meet PBT/vPvB criteria  
Endocrine-disrupting properties: The product fails to meet the criteria.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substance:**




Non-applicable

**3.2 Mixture:**

**Chemical description:** Aqueous mixture composed of chemical products for cleaning products

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: Non-applicable EC: 231-595-7 Index: 017-002-01-X REACH: 01-2119484862-27-XXXX	<b>Hydrochloric acid<sup>(1)</sup></b> Self-classified	<b>10 - &lt;25 %</b>
	Regulation 1272/2008 Met. Corr. 1: H290; Skin Corr. 1B: H314; STOT SE 3: H335 - Danger 	
CAS: 7664-38-2 EC: 231-633-2 Index: 015-011-00-6 REACH: 01-2119485924-24-XXXX	<b>Phosphoric acid<sup>(1)</sup></b> Self-classified	<b>5 - &lt;10 %</b>
	Regulation 1272/2008 Met. Corr. 1: H290; Skin Corr. 1B: H314 - Danger 	
CAS: 7664-39-3 EC: 231-634-8 Index: 009-003-00-1 REACH: 01-2119458860-33-XXXX	<b>hydrogen fluoride<sup>(1)</sup></b> ATP CLP00	<b>1 - &lt;5 %</b>
	Regulation 1272/2008 Acute Tox. 1: H310; Acute Tox. 2: H300+H330; Skin Corr. 1A: H314 - Danger 	

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**Other information:**

Identification	Specific concentration limit
Hydrochloric acid CAS: Non-applicable EC: 231-595-7	% (w/w) >=0,1: Met. Corr. 1 - H290 % (w/w) >=25: Skin Corr. 1B - H314 10<= % (w/w) <25: Skin Irrit. 2 - H315 % (w/w) >=25: Eye Dam. 1 - H318 10<= % (w/w) <25: Eye Irrit. 2 - H319 % (w/w) >=10: STOT SE 3 - H335
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	% (w/w) >=25: Skin Corr. 1B - H314 10<= % (w/w) <25: Skin Irrit. 2 - H315 % (w/w) >=25: Eye Dam. 1 - H318 10<= % (w/w) <25: Eye Irrit. 2 - H319
hydrogen fluoride CAS: 7664-39-3 EC: 231-634-8	% (w/w) >=7: Skin Corr. 1A - H314 1<= % (w/w) <7: Skin Corr. 1B - H314 0,1<= % (w/w) <1: Skin Irrit. 2 - H315

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

Request medical assistance immediately, showing the SDS of this product.

**By inhalation:**

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

Apply a 2.5% calcium gluconate solution for 15 minutes until the pain ceases; if this solution is not available, rinse with water.

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**ALU STRONG****SECTION 4: FIRST AID MEASURES (continued)****By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

Apply a 1% calcium gluconate solution for 10 minutes in physiological saline until the pain ceases; if this solution is not available, rinse with water.

**By ingestion/aspiration:**

Request medical assistance immediately, showing the SDS of this product. Induce vomiting (ONLY IF PERSON IS CONSCIOUS!) and then ingest large quantities of liquid to dilute the toxin. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media:****Suitable extinguishing media:**

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

**Unsuitable extinguishing media:**

Non-applicable

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

**For emergency responders:**

Wear protective equipment. Keep unprotected persons away. See section 8.

**6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

- CONTINUED ON NEXT PAGE -



## ALU STRONG

### SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

#### 6.4 Reference to other sections:

See sections 8 and 13.

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used. **KEEP ONLY IN ORIGINAL PACKAGING.**

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

#### 7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C  
Maximum Temp.: 25 °C  
Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

#### 7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	IOELV (8h)		
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2			1 mg/m <sup>3</sup>
	IOELV (STEL)		2 mg/m <sup>3</sup>
hydrogen fluoride CAS: 7664-39-3 EC: 231-634-8	IOELV (8h)	1,8 ppm	1,5 mg/m <sup>3</sup>
	IOELV (STEL)	3 ppm	2,5 mg/m <sup>3</sup>

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrochloric acid CAS: Non-applicable EC: 231-595-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	15 mg/m <sup>3</sup>	Non-applicable	8 mg/m <sup>3</sup>
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	2 mg/m <sup>3</sup>	10,7 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

- CONTINUED ON NEXT PAGE -



## ALU STRONG

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
hydrogen fluoride CAS: 7664-39-3 EC: 231-634-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	2,5 mg/m <sup>3</sup>	2,5 mg/m <sup>3</sup>	1,5 mg/m <sup>3</sup>	0,0015 mg/m <sup>3</sup>

#### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrochloric acid CAS: Non-applicable EC: 231-595-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	15 mg/m <sup>3</sup>	Non-applicable	8 mg/m <sup>3</sup>
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	Oral	Non-applicable	Non-applicable	0,1 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4,57 mg/m <sup>3</sup>	0,36 mg/m <sup>3</sup>
hydrogen fluoride CAS: 7664-39-3 EC: 231-634-8	Oral	0,01 mg/kg	Non-applicable	0,01 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	0,03 mg/m <sup>3</sup>	1,25 mg/m <sup>3</sup>	0,03 mg/m <sup>3</sup>	0,2 mg/m <sup>3</sup>

#### PNEC:

Identification					
hydrogen fluoride CAS: 7664-39-3 EC: 231-634-8	STP	51 mg/L	Fresh water	0,9 mg/L	
	Soil	11 mg/kg	Marine water	0,9 mg/L	
	Intermittent	Non-applicable	Sediment (Fresh water)	Non-applicable	
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable	

### 8.2 Exposure controls:



#### A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

#### B.- Respiratory protection



The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

#### C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)		EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

#### D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.



#### E.- Body protection

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## ALU STRONG

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

#### F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m <sup>3</sup> (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Fluid
Colour:	Colourless
Odour:	Spicy
Odour threshold:	Non-applicable *

##### Volatility:

Boiling point at atmospheric pressure:	100 °C
Vapour pressure at 20 °C:	2350 Pa
Vapour pressure at 50 °C:	12381,01 Pa (12,38 kPa)
Evaporation rate at 20 °C:	Non-applicable *

##### Product description:

Density at 20 °C:	1109,3 kg/m <sup>3</sup>
Relative density at 20 °C:	1,109
Dynamic viscosity at 20 °C:	1,51 cP
Kinematic viscosity at 20 °C:	1,36 mm <sup>2</sup> /s
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -



**ALU STRONG**

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

pH:	0 - 2
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Highly water-soluble
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
<b>Flammability:</b>	
Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
<b>Particle characteristics:</b>	
Median equivalent diameter:	Non-applicable

**9.2 Other information:**

**Information with regard to physical hazard classes:**

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	H290 May be corrosive to metals.
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

**Other safety characteristics:**

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

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**ALU STRONG**

**SECTION 11: TOXICOLOGICAL INFORMATION**

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

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
  - Acute toxicity : Can be fatal if consumed. For more information see section 2.
  - Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.
- B- Inhalation (acute effect):
  - Acute toxicity : Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
  - Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract
- C- Contact with the skin and the eyes (acute effect):
  - Contact with the skin: Can be fatal if the product is absorbed through the skin. For more information on the secondary effects of skin contact see section 2.
  - Contact with the eyes: Produces serious eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
  - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.  
IARC: hydrogen fluoride (3)
  - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
  - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- E- Sensitizing effects:
  - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
  - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) - single exposure:
 

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- G- Specific target organ toxicity (STOT)-repeated exposure:
  - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
  - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- H- Aspiration hazard:
 

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Phosphoric acid CAS: 7664-38-2 EC: 231-633-2	LD50 oral	3500 mg/kg	Rat
	LD50 dermal	2470 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
hydrogen fluoride CAS: 7664-39-3 EC: 231-634-8	LD50 oral	5 mg/kg	Rat
	LD50 dermal	5 mg/kg	Rat
	LC50 inhalation	0,5 mg/L (4 h)	Rat

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## ALU STRONG

### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

**11.2 Information on other hazards:**

**Endocrine disrupting properties**

Endocrine-disrupting properties: The product fails to meet the criteria.

**Other information**

Non-applicable

### SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

**Acute toxicity:**

Identification	Concentration		Species	Genus
hydrogen fluoride	LC50	925 mg/L (96 h)	Gambusia affinis	Fish
CAS: 7664-39-3	EC50	270 mg/L (48 h)	Daphnia sp.	Crustacean
EC: 231-634-8	EC50	Non-applicable		

**12.2 Persistence and degradability:**

Not available

**12.3 Bioaccumulative potential:**

Not available

**12.4 Mobility in soil:**

Not available

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Endocrine disrupting properties:**

Endocrine-disrupting properties: The product fails to meet the criteria.

**12.7 Other adverse effects:**

Not described

### SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

**Type of waste (Regulation (EU) No 1357/2014):**

HP6 Acute Toxicity, HP8 Corrosive

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

### SECTION 14: TRANSPORT INFORMATION

**Transport of dangerous goods by land:**

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**ALU STRONG**

**SECTION 14: TRANSPORT INFORMATION (continued)**

With regard to ADR 2021 and RID 2021:



- 14.1 UN number or ID number:** UN2922
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrochloric acid ; hydrogen fluoride)
- 14.3 Transport hazard class(es):** 8  
Labels: 8, 6.1
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**  
Special regulations: 274  
Tunnel restriction code: E  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 40-20:



- 14.1 UN number or ID number:** UN2922
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrochloric acid ; hydrogen fluoride)
- 14.3 Transport hazard class(es):** 8  
Labels: 8, 6.1
- 14.4 Packing group:** II
- 14.5 Marine pollutant:** No
- 14.6 Special precautions for user**  
Special regulations: 274  
EmS Codes: F-A, S-B  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L  
Segregation group: Non-applicable
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2023:



- 14.1 UN number or ID number:** UN2922
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrochloric acid ; hydrogen fluoride)
- 14.3 Transport hazard class(es):** 8  
Labels: 8, 6.1
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**  
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**SECTION 15: REGULATORY INFORMATION**

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

- CONTINUED ON NEXT PAGE -



**ALU STRONG**

**SECTION 15: REGULATORY INFORMATION (continued)**

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable  
 Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable  
 Article 95, REGULATION (EU) No 528/2012: Non-applicable  
 REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

Section	Description	Lower-tier requirements	Upper-tier requirements
H2	ACUTE TOXIC	50	200

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

Non-applicable

**Texts of the legislative phrases mentioned in section 2:**

- H290: May be corrosive to metals.
- H318: Causes serious eye damage.
- H310: Fatal in contact with skin.
- H301: Toxic if swallowed.
- H332: Harmful if inhaled.
- H314: Causes severe skin burns and eye damage.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

- Acute Tox. 1: H310 - Fatal in contact with skin.
- Acute Tox. 2: H300+H330 - Fatal if swallowed or if inhaled.
- Met. Corr. 1: H290 - May be corrosive to metals.
- Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.
- Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
- STOT SE 3: H335 - May cause respiratory irritation.

**Classification procedure:**

- CONTINUED ON NEXT PAGE -



## Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation



### ALU STRONG

#### SECTION 16: OTHER INFORMATION (continued)

Eye Dam. 1: Calculation method  
Acute Tox. 2: Calculation method  
Acute Tox. 3: Calculation method  
Acute Tox. 4: Calculation method  
Skin Corr. 1B: Calculation method

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
LogPOW: Octanolwater partition coefficient  
Koc: Partition coefficient of organic carbon  
UFI: unique formula identifier  
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -