

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

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

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

· **1.1 Product identifier**

· **Trade name: Aluoxyd**

· **UFI:** G300-P0H0-200Y-GAC0

· **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** Oxidising agent for aluminium surfaces

· **Uses advised against** Consumer Uses

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

· **Manufacturer/Supplier:**

InnoGrav GmbH

Leinenkamp 9

27299 Langwedel

Germany

Telephone: +49 (0) 4232/94 58-0

Telefax: +49 (0) 4232/94 58-58

E-Mail: info@innograv.com

· **Informing department:** Telephone: +49 (0) 4232 / 94 58 0

· **1.4 Emergency telephone number:**

Gift-Informationszentrum Nord, Göttingen

Poison Information Center, Göttingen

Tel.: +49 (0)551 19240

(German and English only)

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Resp. Sens. 1      H334      May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 2            H341      Suspected of causing genetic defects.

Carc. 1A          H350i    May cause cancer by inhalation.

Repr. 1B         H360D    May damage the unborn child.

STOT RE 1        H372      Causes damage to the respiratory system and the male genitalia through prolonged or repeated exposure. Route of exposure: Inhalation.



GHS05 corrosion

Skin Corr. 1B      H314      Causes severe skin burns and eye damage.

Eye Dam. 1        H318      Causes serious eye damage.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 1)



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.  
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.

### 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 GHS07 GHS08 GHS09

Signal word Danger

#### Hazard-determining components of labelling:

fluoroboric acid  
 copper sulphate pentahydrate  
 nickel sulphate  
 selenious acid  
 phosphoric acid

#### Hazard statements

H302 Harmful if swallowed.  
 H314 Causes severe skin burns and eye damage.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317 May cause an allergic skin reaction.  
 H341 Suspected of causing genetic defects.  
 H350i May cause cancer by inhalation.  
 H360D May damage the unborn child.  
 H372 Causes damage to the respiratory system and the male genitalia through prolonged or repeated exposure. Route of exposure: Inhalation.  
 H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe mist/vapours/spray.  
 P271 Use only outdoors or in a well-ventilated area.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P284 In case of inadequate ventilation wear respiratory protection.  
 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.  
 P310 Immediately call a POISON CENTER/doctor.  
 P391 Collect spillage.

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 2)

P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Restricted to professional users.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Determination of endocrine-disrupting properties**

The product does not contain substances with endocrine disrupting properties.

### SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:**

Aqueous solution of substances listed below with additional ingredients not requiring labelling.

· **Dangerous components:**

CAS: 16872-11-0 EINECS: 240-898-3 Reg.nr.: 01-2119456258-32-X	fluoroboric acid ⚠ Skin Corr. 1B, H314 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	≥ 25 - ≤ 50%
CAS: 7758-99-8 EINECS: 231-847-6 Reg.nr.: 01-2119520566-40-X	copper sulphate pentahydrate ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); ⚠ Acute Tox. 4, H302 ATE: LD50 oral: 481 mg/kg	≥ 3 - < 10%
CAS: 7664-38-2 EINECS: 231-633-2 Reg.nr.: 01-2119485924-24-X	phosphoric acid ⚠ Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	≥ 3 - < 10%
CAS: 7783-00-8 EINECS: 231-974-7 Reg.nr.: 01-2119548405-38-X	selenious acid ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ STOT RE 2, H373; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≥ 2.5 - < 10%
CAS: 7786-81-4 EINECS: 232-104-9 Reg.nr.: 01-2119439361-44-X	nickel sulphate ⚠ Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350i; Repr. 1B, H360D; STOT RE 1, H372; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317 Specific concentration limits: STOT RE 1; H372: C ≥ 1 % STOT RE 2; H373: 0.1 % ≤ C < 1 % Skin Irrit. 2; H315: C ≥ 20 % Skin Sens. 1; H317: C ≥ 0.01 %	1%

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

EU

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

Trade name: Aluoxyd

(Contd. from page 3)

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
  - **General information** Instantly remove any clothing contaminated by the product.
  - **After inhalation** Supply fresh air; consult doctor in case of symptoms.
  - **After skin contact**  
Instantly wash with water and soap and rinse thoroughly.  
Remove contaminated clothing immediately.  
Wash contaminated clothing before re-use.
  - **After eye contact**  
Rinse opened eye for several minutes under running water. Then consult doctor.  
Remove contact lenses if possible.  
Use eye protection.
  - **After swallowing** Rinse mouth and immediately consult physician.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents**  
The product itself does not burn.  
Use fire fighting measures that suit the environment.
  - **For safety reasons unsuitable extinguishing agents** None known.
- **5.2 Special hazards arising from the substance or mixture**  
Inhalation of combustion gases may cause serious health hazards.  
Can be released in case of fire:  
Copper compounds  
Selenium compounds  
Nickel compounds  
Boron compounds  
Fluorides
- **5.3 Advice for firefighters**
  - **Protective equipment:** Wear self-contained breathing apparatus.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **For non-emergency personnel**  
Avoid contact with the product.  
Ensure adequate ventilation
- **For emergency responders** Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.  
Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage. Keep substance damp using water spray. Do not use water jet.  
Avoid breathing dust. Avoid creating dusty conditions and prevent wind dispersal. Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).  
Dispose of the material collected according to regulations.  
Ensure adequate ventilation.

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 4)

Complete cleaning with water.

- **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 information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care.

Prevent formation of aerosols.

- **Information about protection against explosions and fires:** Keep breathing equipment ready.

- **Handling**

Do not eat, drink or smoke while working.

Wash thoroughly after handling.

Take off all contaminated clothing immediately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Wash contaminated clothing before re-use.

Remove contaminated clothing and protective equipment before entering eating areas.

Store protective clothing separately.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by storerooms and containers:**

Storage according to local standards.

Keep container tightly closed and store upright to prevent any spill of product.

- **Information about storage in one common storage facility:**

Keep away from food, drink and animal feeding stuffs.

- **Further information about storage conditions:**

Protect from frost.

Protect from direct sunlight.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

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

WEL: workplace exposure limit

OEL: Occupational Exposure Limit

IOELV: Indicative Occupational Exposure Limit Values, workplace threshold value of the European Union

BOELV: Binding Occupational Exposure Limit Values

#### 7664-38-2 phosphoric acid

IOELV (European Union)	Short-term value: 2 mg/m <sup>3</sup>
	Long-term value: 1 mg/m <sup>3</sup>

WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup>
	Long-term value: 1 mg/m <sup>3</sup>

#### 7786-81-4 nickel sulphate

BOELV (European Union)	Long-term value: 0.1* mg/m <sup>3</sup> as Ni; sens. dermal/resp. *inhalable
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(Contd. on page 6)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 5)

WEL (Great Britain)	Long-term value: 0.1 mg/m <sup>3</sup> as Ni; Sk; Carc; Sen
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**· DNELs****16872-11-0 fluoroboric acid**

Oral	DNEL (consumer, long-term, systemic)	0.023 mg/kg bw/day (human)
Dermal	DNEL (worker, short-term, systemic)	0.046 mg/kg bw/day (human)
	DNEL (worker, long-term, systemic)	0.046 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	0.023 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	0.173 mg/m <sup>3</sup> (human)
	DNEL (consumer, long-term, systemic)	0.043 mg/m <sup>3</sup> (human)

**7758-99-8 copper sulphate pentahydrate**

Oral	DNEL (consumer, long-term, local)	0.041 mg/kg bw/day (human) Daten aus dem SDB des Lead-Registranten manica
Dermal	DNEL (worker, long-term, systemic)	137 mg/kg bw/day (human) Daten aus Datenblatt des Lead-Registranten (manica)

**7664-38-2 phosphoric acid**

Oral	DNEL (consumer, long-term, systemic)	0.1 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	10.7 mg/m <sup>3</sup> (human)
	DNEL (consumer, long-term, systemic)	4.57 mg/m <sup>3</sup> (human)
	DNEL (worker, short-term, local)	2 mg/m <sup>3</sup> (human)
	DNEL (worker, long-term, local)	1 mg/m <sup>3</sup> (human)
	DNEL (consumer, long-term, local)	0.36 mg/m <sup>3</sup> (human)

**· PNECs****7758-99-8 copper sulphate pentahydrate**

PNEC aqua (freshwater)	0.0078 mg/L (.)
PNEC aqua (marine water)	0.0052 mg/L (.)
PNEC STP - Sewage Treatment Plant	0.23 mg/L (.)
PNEC soil	65 mg/kg soil dw (.)
PNEC sediment (freshwater)	87 mg/kg sedim. dw (.)
PNEC sediment (marine water)	676 mg/kg sedim. dw (.)

· **Additional information:** The lists that were valid during the compilation were used as basis.

**· 8.2 Exposure controls****· Individual protection measures, such as personal protective equipment****· General protective and hygienic measures**

Take off all contaminated clothing immediately.  
Wash hands during breaks and at the end of the work.  
Store protective clothing separately.

**· Breathing equipment:**

Not required when used as intended.  
Use respiratory protection in case of aerosol or mist formation.  
Filter P3.

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

**· Hand protection**

Protective gloves.

(Contd. on page 7)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 6)

Only use chemical-protective gloves with CE-labelling of category III (EN 374).

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

- **Material of gloves**

Nitrile rubber, NBR

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.

- **Penetration time of glove material**

In case of a layer thickness of 0.33 mm the penetration time is longer than 480 minutes.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection**



Safety glasses

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

<ul style="list-style-type: none"> <li>· <b>Physical state</b></li> </ul>	Fluid
<ul style="list-style-type: none"> <li>· <b>Colour:</b></li> </ul>	Blue
<ul style="list-style-type: none"> <li>· <b>Odour:</b></li> </ul>	odourless
<ul style="list-style-type: none"> <li>· <b>Odour threshold:</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Melting point/freezing point:</b></li> </ul>	< 0 °C
<ul style="list-style-type: none"> <li>· <b>Boiling point or initial boiling point and boiling range</b></li> </ul>	> 100 °C
<ul style="list-style-type: none"> <li>· <b>Flammability</b></li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· <b>Lower and upper explosion limit</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Lower:</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Upper:</b></li> </ul>	Not applicable
<ul style="list-style-type: none"> <li>· <b>Flash point:</b></li> </ul>	Product is not selfigniting.
<ul style="list-style-type: none"> <li>· <b>Auto-ignition temperature:</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Decomposition temperature:</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>SADT</b></li> </ul>	< 1
<ul style="list-style-type: none"> <li>· <b>pH at 20 °C</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Viscosity:</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Kinematic viscosity</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>dynamic:</b></li> </ul>	Fully miscible
<ul style="list-style-type: none"> <li>· <b>Solubility</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Water:</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Partition coefficient n-octanol/water (log value)</b></li> </ul>	1.099 g/cm <sup>3</sup>
<ul style="list-style-type: none"> <li>· <b>Vapour pressure:</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Density and/or relative density</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Density at 20 °C</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Relative density</b></li> </ul>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Vapour density</b></li> </ul>	Not determined.

(Contd. on page 8)



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 7)

**· 9.2 Other information****· Appearance:****· Form:**

Fluid

**· Important information on protection of health and environment, and on safety.****· Self-inflammability:**

Product is not selfigniting.

**· Explosive properties:**

Product is not explosive.

**· Change in condition****· Evaporation rate**

Not determined.

**· Information with regard to physical hazard classes****· Explosives**

Void

**· Flammable gases**

Void

**· Aerosols**

Void

**· Oxidising gases**

Void

**· Gases under pressure**

Void

**· Flammable liquids**

Void

**· Flammable solids**

Void

**· Self-reactive substances and mixtures**

Void

**· Pyrophoric liquids**

Void

**· Pyrophoric solids**

Void

**· Self-heating substances and mixtures**

Void

**· Substances and mixtures, which emit flammable gases in contact with water**

Void

**· Oxidising liquids**

Void

**· Oxidising solids**

Void

**· Organic peroxides**

Void

**· Corrosive to metals**

Void

**· Desensitised explosives**

Void

**SECTION 10: Stability and reactivity****· 10.1 Reactivity** No further relevant information available.**· 10.2 Chemical stability****· Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**· 10.3 Possibility of hazardous reactions** No dangerous reactions known**· 10.4 Conditions to avoid** No further relevant information available.**· 10.5 Incompatible materials:** No further relevant information available.**· 10.6 Hazardous decomposition products:**

None in case of intended use and storage in compliance with instructions.

**SECTION 11: Toxicological information****· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****· Acute toxicity** Harmful if swallowed.**· LD/LC50 values that are relevant for classification:****7758-99-8 copper sulphate pentahydrate**

Oral	LD50	481 mg/kg (ATE) 482 mg/kg (rat) (OECD401)
Dermal	LD50	> 2,000 mg/kg (rat) (OECD402)

(Contd. on page 9)



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 8)

**7664-38-2 phosphoric acid**

Oral	LD50	2,600 mg/kg (rat) (OECD 423)
Dermal	LD50	2,740 mg/kg (rabbit)
Inhalative	LC50	25 mg/l/1h (mouse)

**7783-00-8 selenious acid**

Oral	LD50	23.3 mg/kg (mouse) 68.1 mg/kg (rat)
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**7786-81-4 nickel sulphate**

Oral	LD50	319 mg/kg (rat) (OECD 401)
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- **Skin corrosion/irritation**

Causes severe skin burns and eye damage.

- **Serious eye damage/irritation** Causes serious eye damage.

- **Respiratory or skin sensitisation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

- **Germ cell mutagenicity** Suspected of causing genetic defects.

- **Carcinogenicity** May cause cancer by inhalation.

- **Reproductive toxicity** May damage the unborn child.

- **STOT-single exposure** Based on available data, the classification criteria are not met.

- **STOT-repeated exposure**

Causes damage to the respiratory system and the male genitalia through prolonged or repeated exposure. Route of exposure: Inhalation.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

- **Additional toxicological information:**

- **Repeated dose toxicity**

**16872-11-0 fluoroboric acid**

Inhalative	NOAEC (28d)	40 mg/m <sup>3</sup> (rat) (OECD 421)
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- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

Muta. 2, Carc. 1A, Repr. 1B

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

## SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

**16872-11-0 fluoroboric acid**

LC50	2,600 mg/l/96h (Danio rerio) (OECD 203)
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**7758-99-8 copper sulphate pentahydrate**

EC50 (static)	0.0318 mg/l/48h (Daphnia magna)
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LC50	810 mg/l/96h (Cyprinus carpio)
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**7664-38-2 phosphoric acid**

EC50 (static)	> 100 mg/l/48h (Daphnia magna) (OECD 202)
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IC50	270 mg/l/72h (activated sludge)
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LC50 (static)	75.1 mg/l/96h (Oryzias latipes) (OECD 203)
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EC50 (static)	> 100 mg/l/72h (Desmodesmus subspicatus) (OECD 202)
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**7783-00-8 selenious acid**

EC50	1.12 mg/l/48h (Daphnia magna) (OECD 202)
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(Contd. on page 10)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023

Version number 1

Revision: 13.09.2023

**Trade name: Aluoxyd**

(Contd. from page 9)

LC50 (dynamic)	5.19 mg/l/96h (Pimephales promelas) (EPA OPP 72-1)
EC50	15.7 mg/l/72h (Selenastrum capricornutum) (OECD 201)

- **12.2 Persistence and degradability**

Anorganic product, is not eliminable from water by means of biological cleaning processes.

- **Other information:** There are no data available about the preparation.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

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

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

- **12.7 Other adverse effects**

- **Additional ecological information:**

- **General notes:**

Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into soil.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

The waste code numbers mentioned are recommendations based on the probable use of the product.

- **European waste catalogue**

06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 01 00	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 06*	other acids
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP7	Carcinogenic
HP8	Corrosive
HP10	Toxic for reproduction
HP11	Mutagenic
HP14	Ecotoxic

- **Uncleaned packagings:**

- **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Non contaminated packagings can be used for recycling.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

EU

(Contd. on page 11)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 13.09.2023




Version number 1

Revision: 13.09.2023

Trade name: Aluoxyd

(Contd. from page 10)

### SECTION 14: Transport information

<ul style="list-style-type: none"> <li>· 14.1 UN number or ID number</li> <li>· ADR/RID, IMDG, IATA</li> </ul>	UN3264
<ul style="list-style-type: none"> <li>· 14.2 UN proper shipping name</li> <li>· ADR/RID</li> <li>· IMDG, IATA</li> </ul>	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FLUOROBORIC ACID), ENVIRONMENTALLY HAZARDOUS CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FLUOROBORIC ACID)
<ul style="list-style-type: none"> <li>· 14.3 Transport hazard class(es)</li> <li>· ADR/RID</li> </ul>	<div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>
<ul style="list-style-type: none"> <li>· IMDG, IATA</li> </ul>	<div style="display: flex; align-items: center; gap: 10px;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>
<ul style="list-style-type: none"> <li>· 14.4 Packing group</li> <li>· ADR/RID, IMDG, IATA</li> </ul>	III
<ul style="list-style-type: none"> <li>· 14.5 Environmental hazards:</li> <li>· Special marking (ADR/RID):</li> </ul>	Symbol (fish and tree)
<ul style="list-style-type: none"> <li>· 14.6 Special precautions for user</li> <li>· Kemler Number:</li> <li>· EMS Number:</li> <li>· Segregation groups</li> <li>· Stowage Category</li> <li>· Stowage Code</li> <li>· Segregation Code</li> </ul>	Warning: Corrosive substances. 80 F-A,S-B (SGG1) Acids B SW2 Clear of living quarters. SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
<ul style="list-style-type: none"> <li>· 14.7 Maritime transport in bulk according to IMO instruments</li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> </ul>	<hr style="border-top: 1px dashed black;"/> <ul style="list-style-type: none"> <li>· ADR/RID</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> <li>· Transport category</li> <li>· Tunnel restriction code</li> </ul>

(Contd. on page 12)

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(Contd. from page 11)

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul> | <p>5L<br/>Code: E1<br/>Maximum net quantity per inner packaging: 30 ml<br/>Maximum net quantity per outer packaging: 1000 ml</p> |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>  | <p>UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FLUOROBORIC ACID), 8, III, ENVIRONMENTALLY HAZARDOUS</p>                 |

### SECTION 15: Regulatory information

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

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** E1 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 27, 28, 30

- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **REGULATION (EU) 2019/1148**

- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

- **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

- **National regulations**

- **Information about limitation of use:**

- Employment restrictions concerning young persons must be observed.
- Employment restrictions concerning women of child-bearing age must be observed.

- **Water hazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.

- **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is contained.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

(Contd. on page 13)

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(Contd. from page 12)

This safety data sheet meets the requirements of Regulation (EU) 2015/830 and 2020/878 amending Annex II of Regulation (EC) 1907/2006.

· **Relevant phrases**

The phrases specified here are no labelling elements for the product but repeat the properties of the ingredients from section 3.

- H290 May be corrosive to metals.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H341 Suspected of causing genetic defects.
- H350i May cause cancer by inhalation.
- H360D May damage the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing data specification sheet:**

- **DEKRA** This Safety Data Sheet has been drawn up in cooperation with:  
DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,  
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· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
SVHC: Substances of Very High Concern  
vPvB: very Persistent and very Bioaccumulative  
Met. Corr. 1: Corrosive to metals – Category 1  
Acute Tox. 3: Acute toxicity – Category 3  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Resp. Sens. 1: Respiratory sensitisation – Category 1  
Skin Sens. 1: Skin sensitisation – Category 1  
Muta. 2: Germ cell mutagenicity – Category 2  
Carc. 1A: Carcinogenicity – Category 1Ai  
Repr. 1B: Reproductive toxicity – Category 1B  
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2