



## Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

### ALUM POWDER

#### 1. Identification of the substance/preparation and the company

Trade name: Alum powder  
Utilisation: Raw material for cosmetics, deodorants  
Supplier company: **Elemental SRL**, Piata Cazarmii no.15, 410188-Oradea, jud.Bihor, Romania  
identification: Tel/Fax: +40259-436.755, www.elemental.eu  
Emergency: RO: numar national pentru cazuri de urgenta: 021 3183606 Institutul de Sanatate Publica Bucuresti. International emergency number: +49 180 2273-112

#### 2. Hazards Identification

##### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Eye Irrit. 2 H319 Causes serious eye irritation.

Classification according to Directive No 67/548/EEC / Directive 1999/45/EC

Xn: Harmful

R36: Irritating to eyes

Further information on health effects and symptoms can be found in Section 11

##### 2.2 Labelling elements

Label in accordance with (EC) No.1272/2008

Hazard pictograms:

GHS07



Signal word: Danger.

Hazard statements: H319 Causes serious eye irritation.

Precautionary statements: P280 Wear protective gloves/protective clothing/eye protection/face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue to rinse. P337 + P313 If eye irritation persists: Get medical advice/attention. P235 Keep cool. P501: Dispose of contents/container to ...[... in accordance with local/regional/national/international regulation].

Risk Phrases: R36 Irritating to eyes.

Safety Phrases: S 26 In case of contact with eyes, rinse immediately with plenty of water and consult a physician.

##### 2.3. Other hazards

Other hazards which do not result in classification: not available.

#### 3. Composition / Information on ingredients

##### 3.1. Substances

INCI Name: Potassium Alum

Chemical Formula:  $KAl(SO_4)_2 \cdot 12H_2O$

N° CAS: 7784-24-9

Alum stone powder extracted from alunite rock mines.

##### 3.2. Mixtures --

#### 4. First Aid

##### 4.1. Description of first aid measures

General information: Seek medical attention if problems persist.

After inhalation: Provide fresh air. If irritation develops seek medical assistance.

After contact with skin: Gently wash with plenty of soap and water.

After contact with eyes: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. If irritation persists seek medical assistance.



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After ingestion: Rinse mouth immediately and drink large quantities of water. Do not induce vomiting,

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

No data available

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

No data available

### 5. Fire-fighting Measures

5.1. Extinguishing media

Suitable extinguishing media: foam, CO<sub>2</sub>, powder

Extinguishing media which must not be used for safety reasons: water stream

5.2. Special hazards arising from the substance or mixture

Non-combustible. When heated to high temperatures or fire formation of dangerous fumes possible.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Avoid breathing in vapour or smoke emitted.

### 6. Accidental release measures:

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not breathe gas/vapour/spray. Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment.

6.3. Methods and material for containment and cleaning up

Remove mechanically, placing in appropriate containers for disposal. Do not flush into surface water or sanitary sewer system.

### 7. Handling and Storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Avoid formation of dust. Handle in accordance with good industrial hygiene and safety.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in a well-ventilated place. Keep container tightly closed.

Further information on storage conditions: keep dark and dry, avoid heat.

### 8. Exposure Controls and Personal Protection

8.1. Control parameters

Components with workplace control parameters

Potassium Alum: TWA, OES LT EXP 8 Hrs 2 mg/m<sup>3</sup>.

For dusts of any kind, ensure LTEL (8-hour TWA ref. period) level does not exceed 10 mg.m<sup>3</sup> for total inhalable dust or 4 mg.m<sup>3</sup> for respirable dust.



8.2. Exposure controls

Protective and hygiene measures: remove contaminated clothes

Respiratory protection: Provide adequate general and local exhaust ventilation. If unable to control dust emissions below recommended limits, an approved respiratory protection must be used at all times.

Hand protection: The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.



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Eye protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: wear clothing as usual in chemical industry

#### 9. Physical and Chemical Properties

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

Physical state:	crystals
Colour:	white
Odour:	odourless
pH-Value:	3-3.5 (10% aqueous solution)
Changes in the physical state	
Melting point:	Melting point/range: 92 °C (198 °F) - lit.
Initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Flash point:	Not applicable
Flammability	
Solid:	Not applicable
Gas:	Not applicable
Explosive properties	
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Ignition temperature:	No data available
Auto-ignition temperature	
Solid:	Not applicable
Gas:	Not applicable
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	1.5 - 1.7 g/cm <sup>3</sup> at 25 °C
Bulk density:	No data available
Water solubility:	soluble in water: 110g / l (at 20° C)
Solubility in other solvents	insoluble in ethanol
Partition coefficient:	No data available
Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available
Flow time:	No data available
Vapour density:	No data available
Evaporation rate:	No data available
Solvent content:	no solvent residues
9.2. Other information	no information available

#### 10. Stability and Reactivity

10.1. Reactivity: No data available

10.2. Chemical stability: No data available

10.3. Possibility of hazardous reactions: No data available

10.4. Conditions to avoid: No information available

10.5. Incompatible materials: Alkali hydroxides and carbonates, cyanides, sulphides, salts of calcium, lead and phosphates.



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10.6. Hazardous decomposition products: when heated to decomposition (> 200 ° C) or at a fire, toxic gas formed and corrosive oxides of sulphur.

**11. Toxicological Information**

## 11.1. Information on toxicological effects

## Acute toxicity

Not classified as acutely toxic according to EU Regulations 1272/2008 and 286/2011 (second ATP).

Ingestion: Oral TDLo rats: 4355 - 8040mg / kg. Low order of acute toxicity. LD 50 - 30g/oral (human).

Irritation and corrosivity: May cause irritation to eyes, skin, and mucous membranes. Astringent property may cause tightening of the skin.

Sensitising effects: Not classified as a sensitizer according to EU regulations 1272/2008 and 286/2011 (2 ATP).

Source ECHA.

Severe effects after repeated or prolonged exposure: No data available

Carcinogenic/mutagenic/toxic effects for reproduction

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Empirical data on effects on humans: No data available

**12. Ecological Information**

## 12.1. Toxicity

No specific data or information available regarding environmental impact. Discharge to aquatic environments should be avoided as it may lead to localised adverse effects due to pH shift of solution.

12.2. Persistence and degradability: No data available

12.3. Bioaccumulative potential: No data available

12.4. Mobility in soil: No data available

12.5. Results of PBT and vPvB assessment: No data available

**13. Disposal Considerations**

Dispose of or recycle waste material in accordance with local and EC environmental regulations.

Air emission : avoid

Wastewater disposal : avoid

Release into natural environment: avoid

Waste destruction: in accordance with valid regulations

**14. Transport Information**

## Land transport (ADR/RID)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

## Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

## Marine transport (IMDG)



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14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.  
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number: No dangerous good in sense of this transport regulation.  
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.  
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.  
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

Other applicable information: no dangerous good in the sense of the transport regulations

### 15. Additional Regulatory Information

Regulations specific for the substance or mixture: not available data. Water hazard class (Germany): Water hazard class 1 small hazard to water. Chemical safety assessment: not available data

### 16. Other Information

Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no



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warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.