



Material Safety Data Sheet Aluminium Sulphate

Edition: 04//2018

1) Identification of substance/preparation and of the company undertaking

1.1) Product Identifier

Material	Aluminium Sulphate
Synonyms	Aluminum Sulfate, Aluminum Alum, Patent Alum, Filter alum, Paper Maker's Alum, aluminum salt
EC No	233-135-0
CAS No	10043-01-3
REACH registration No	Exempt
Company	Inoxia Ltd 45.7 Dunsfold Park Stovolds Hill Cranleigh Surrey GU6 8TB Tel: 02032 909990 safety@inoxia.co.uk www.inoxia.co.uk

2) Hazard Identification

Classification of the substance or mixture: Classification according to Regulation (EC) No. 1272/2008

Signal words: Warning

Pictogram:



GHS Label elements, including precautionary statements: Labelling according Regulation (EC) No 1272/2008.

Other hazards: Not applicable.

Potential health effects:

- **Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.
- **Ingestion :** May be harmful if swallowed.
- **Skin:** May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes:** May cause eye irritation

3) Composition/Information on ingredients

- **Chemical Name:** Aluminium Sulphate
- **Chemical Atomic Formula:** $Al_2(SO_4)_3 \cdot 14H_2O$
- **CAS#** 10043-01-3
- **EC#:** 233-135-0
- **Assay:** Aluminium Sulphate 17%

4) First Aid Measures

- **Eyes:** Wash with plenty of water for at least 15 minutes, and seek the doctor if necessary.
- **Skin:** Wash with plenty of water.
- **Inhalation:** If breathed in, move person to fresh air place and keep at rest. Consult doctor if necessary. If not breathing, give artificial respiratory.
- **Ingestion:** If swallowed, rinse mouth with water. Seek medical attention.
- **Self-protection of the first aider:** Wear gloves while contacting the products. For more details, please check section 8.

5) Firefighting Measures

- **Flash Point:** Product is not flammable.
- **Flammable Limits:** Product is not flammable.
- **Special Fire Fighting Procedures:** Use fire fighting procedure that is appropriate to treat surrounding fire.
- **Specific hazards arising from the chemical:** Emit toxic fumes under fire condition. (Aluminum Oxide, Potassium Oxide, and Sulphur Oxide) Extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or Carbon dioxide.
- **Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

6) Accidental Release Measures

- Isolate hazard area and deny entry to unnecessary or unprotected personnel.
- Contain spill, sweep up, collect and place in a disposal container.

- Avoid run off into storm sewers and ditches which lead to waterways.

7) Handling and Storage

Precautions for safe handling:

- Avoid contact with skin, eyes and clothing.
- Avoid breathing dust.
- Use normal personal hygiene and housekeeping.

Conditions for safe storage, including any incompatibilities:

Store in cool dry area -4- away from other incompatible materials. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking. Please see section 8 for recommendations.

8) Exposure Controls/Personal Protection

Exposure controls:

Appropriate engineering controls
General industrial hygiene practice.

Personal protective equipment:

Eye/face protection

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

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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

Full contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9) Physical/Chemical Properties

- **Appearance:** White granular powder.
- **Odour:** Odorless
- **Boiling Point:** Over 120
- **Flash Point:** Not Flammable
- **Vapor Pressure (MM Hg):** Not Applicable
- **Vapor Density(AIR=1):** Not Applicable
- **Relative Density(H₂O=1):** 1.5 g/cm³ at 25°C
- **Percent Volatile by Volume (%):** Not Applicable
- **Melting Point:** 93~94°C
- **Evaporation Rate (Butyl Acetate=1):** Not Applicable
- **Partition coefficient: noctanol/water:** Not Applicable
- **Upper/lower flammability or explosive limits:** Not Applicable
- **Auto-ignition temperature:** Not Applicable
- **Decomposition temperature:** Not Applicable
- **Viscosity:** Not Applicable
- **Explosive properties:** Not Applicable
- **Oxidizing properties:** Not Applicable
- **Solubility in Water:** 870/g100ml(20°C, dodecahydrate)
- **Molecular Weight:** 594.15g/mol
- **PH:** 3.0 min. (100g/l, H₂O, 20°C)

10) Stability/Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Reactivity: No information known.

Hazardous Polymerization: Will not occur under normal conditions.

Hazardous Decomposition Products: Other decomposition products - no data available In the event of fire: see section 5.

Incompatible Materials: Strong oxidizing agents, Bases, Steel (all types and surface treatments), Aluminum, Copper, Zinc.

11) Toxicological Information

- **Acute toxicity:** no data available
- **Skin corrosion/irritation:** no data available
- **Serious eye damage/eye irritation:** no data available
- **Respiratory or skin sensitization:** no data available
- **Germ cell mutagenicity:** no data available
- **Carcinogenicity:** 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.
- **Reproductive toxicity:** Developmental Toxicity - rat - Oral Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).
- **Specific target organ toxicity - single exposure:** no data available
- **Specific target organ toxicity - repeated exposure:** no data available
- **Aspiration hazard:** no data available

Signs and Symptoms of Exposure: Gastrointestinal disturbance, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information: RTECS: WS5690000

12) Ecological Information

- **Toxicity:** no data available
- **Persistence and degradability:** -8- no data available
- **Bioaccumulative potential:** no data available
- **Mobility in soil:** no data available
- **Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- **Other adverse effects:** no data available

13) Disposal Consideration

Disposal Methods: Dispose of according to relevant local, state and federal government regulations. Consult with appropriate regulatory agencies if necessary.

14) Transport Information

General: Not classified as hazardous for transport, and Not dangerous goods.

UN number: Not applicable

UN proper shipping name: Not dangerous goods

Transport Hazard class: Not applicable

(ADR,AND,IMDG,IATA)

Packing group: Not applicable
(ADR,IMDG,IATA)

Environmental hazards: Not applicable

Special precautions for user: Not applicable

15) Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out.

16) Other

NFPA Ratings – Health – 0 Flammability – 0 Reactivity – 0

HMIS Ratings - Health – 0 Fire – 0 Reactivity – 0 Personal - 0

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.