



**Mining Chemicals SA**

+27 69 755 4350 | INFO@MININGCHEM.CO.ZA | WWW.MININGCHEM.CO.ZA

Material Safety Data Sheets (MSDS)



*Safety First*

## Aluminum Sulphate 18H<sub>2</sub>O

---

### Identification of Product

Chemical Code: BULK-A

Chemical Name: Aluminium Sulphate 18H<sub>2</sub>O

Chemical Grade: Technical

Chemical Formula: Al<sub>2</sub>O<sub>12</sub>S<sub>3</sub> · 18H<sub>2</sub>O

Chemical Weight: 666.43 g/mol

CAS No: 7784-31-8

Chemical Synonyms: Aluminum Sulfate Octadecahydrate

---

### Hazards Identification

REACH No: No Data Available

Signal Word: Danger

Supplemental Hazard Information:

Additional Hazard Information: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



### Hazards statements

H290 - May be corrosive to metals.

H318 - Causes serious eye damage.

## Precautionary statements

P280 - Wear eye protection/face protection.

P305 + P351 + P338 + P310 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison center/doctor.

---

## Composition of Chemical

Chemical Formula:  $\text{Al}_2\text{O}_3 \cdot 18\text{H}_2\text{O}$

EC No 1272/2008: No Data Available

---

## First Aid Measures

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If: Inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

If: Skin Contact: Wash off with soap and plenty of water. Consult a physician.

If: Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If: Swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Important Symptoms: The most important known symptoms and effects are described in the labelling section.

Immediate Medical Attention: No Data Available

---

## Firefighting Measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or Carbon Dioxide.

Hazards Arising: No Data Available

Advice for Firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Info for Firefighting: No Data Available

---

## Accidental Release Measures

Personal Precautions: Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions: Do not let product enter drains

Method for Containment: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

---

## Handling and Storage

Personal Precautions: Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

Environmental Precautions: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

---

## Exposure Controls | Personal Protection

Derived No Effect Level (DNEL)

Workers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Consumers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Predicted No Effect Concentration (PNEC)

No Data Available

Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Eye/Face Protection: Face shield and safety glasses. 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 gloves 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®

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min.

Material tested: Dermatril®

Data source: KCL GmbH, D-36124, Test method: EN 374

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:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

---

## Physical and Chemical Properties

**Appearance:** White crystals, granules or powder

**Odour:** No Data Available

**Odour Threshold:** No Data Available

**pH:** No Data Available

**Melting Point:** No Data Available

**Boiling Point:** No Data Available

**Flash Point:** No Data Available

**Evaporation:** No Data Available

**Flammability:** No Data Available

**Upper/Lower Flammability or Explosive Limits:** No Data Available

**Vapour pressure:** No Data Available

**Vapour density:** No Data Available

**Relative density:** No Data Available

**Water solubility:** No Data Available

**Partition Coefficient:** No Data Available

**Auto-ignition Temperature:** No Data Available

**Decomposition Temperature:** No Data Available

**Viscosity:** No Data Available

**Explosive properties:** No Data Available

**Oxidizing properties:** No Data Available

**Other Safety Info:** No Data Available

---

## Stability and Reactivity

Reactivity: No Data Available

Chemical Stability: Stable under recommended storage conditions

Possibility of hazardous reactions: No Data Available

Conditions to Avoid: Air, exposure to moisture

Incompatible Materials: Strong oxidizing agents. Incompatible with strong bases and oxidizing agents. Ammonia, Water, Amines

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions - Sulphur Oxides, Aluminum Oxide

Other decomposition products - No data available

---

## Toxicological Information

Acute Toxicity: LD50 Oral - Rat -> 9.000 mg/kg

Skin Corrosion/Irritation: Skin - Rabbit

Result: No skin irritation

Serious Eye damage | Eye Irritation: Eyes - Rabbit

Result: Severe eye irritation

Cell Mutagenicity: Mouse: Cytogenetic analysis

Mouse: Sister chromatid exchange

Carcinogenicity: ARC: 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: No Data Available

Specific Target Organ Toxicity - Single Exposure: No Data Available

Specific Target Organ Toxicity - Repeated Exposure: No Data Available

Aspiration Hazard: No Data Available

---

## Ecological Information

Ecological Toxicity: No Data Available

Ecological Persistence and degradability: No Data Available

Bioaccumulative Potential: No Data Available

Mobility in Soil: No Data Available

Results of PBT and vPvB Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other Adverse Effect: No Data Available

---

## Disposal Considerations

### Waste Treatment Methods: Product:

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging:

Dispose of as unused product.

---

## Transport Information

UN Number: ADR/RID: 3260

IMDG: 3260

IATA: 3260

UN Shipping Hazard: ADR/RID: Corrosive solid, acidic, inorganic, n.o.s. (Aluminum Sulfate Octadecahydrate)

IMDG: Corrosive solid, acidic, inorganic, n.o.s. (Aluminum Sulfate Octadecahydrate)

IATA: Corrosive solid, acidic, inorganic, n.o.s. (Aluminum Sulfate Octadecahydrate)

Transport Hazard Class: ADR/RID: 8

IMDG: 8

IATA: 8

Packaging Group: ADR/RID: III

IMDG: III

IATA: III

Environmental Hazards: ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Special Precautions: No Data Available

---

## Regulatory Information

Safety, Health and environmental regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

Additional Info: RTECS: WS5697000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

---

### Disclaimer

The information stated above is considered to be correct, but does not claim to be inclusive and shall only be used as a guideline. The information provided by this document is confirmed by our continuous updating of knowledge and adheres to the products appropriate safety precautions. It does not represent any guarantee of the product's properties. RLS Chemicals and its Associates shall not be held accountable for any damage's consequent of handling the above product.

---