

# SAFETY DATA SHEET

## ALUMINIUM SULPHATE KIBBLED, 17% Al<sub>2</sub>O<sub>3</sub>

mals002

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

**Product name** : ALUMINIUM SULPHATE KIBBLED, 17% Al<sub>2</sub>O<sub>3</sub>      **Supplier** : Brenntag UK and Ireland  
 Albion House  
 Rawdon Park  
 Green Lane  
 Yeadon  
 Leeds  
 LS19 7XX

**Chemical product name** : ALUMINIUM TRISULPHATE, HYDRATED

**Synonyms** : CAKE ALUM

**EMERGENCY ONLY TELEPHONE NUMBER** : (N.C.E.C. CULHAM) 01865 407333      **Telephone No.** : (0113) 3879200

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**Molecular Mass** : 342.1

### 2. Composition/information on ingredients

**Substance/Preparation** : Substance

Chemical name*	CAS No.	%	EC Number	Symbol	R-Phrases
1) ALUMINIUM TRISULPHATE, HYDRATED	10043-01-3	14-17	233-135-0	Xi	R36/37/38

\* Occupational Exposure Limit(s), if available, are listed in Section 8

**Composition**      TYPICAL ANALYSIS:  
 % w/w  
 ALUMINIUM OXIDE (Al<sub>2</sub>O<sub>3</sub>)      17.1  
 SULPHUR TRIOXIDE (SO<sub>3</sub>) COMBINED      39.4  
 WATER      43.5  
 IRON OXIDE (Fe<sub>2</sub>O<sub>3</sub>)      0.2 (MAX)  
 FRACTIONS:- 10mm - 85mm

**CAS No.**      10043-01-3

**EINECS Number**      233-135-0

### 3. Hazards identification

**Human health hazards** : Irritating to eyes, respiratory system and skin.

### 4. First-aid measures

#### First-Aid measures

**Inhalation** : Remove from exposure. Keep warm and at rest. If there is difficulty in breathing, give oxygen. If breathing stops or shows signs of failing, give artificial respiration. Do not use mouth to mouth ventilation. Obtain medical attention urgently.

**Ingestion** : Wash out mouth with water. Give sips of cold water or milk to soothe the affected parts. Ingested acid must be diluted by approximately x 100, to render harmless to tissues. Do not induce vomiting. Obtain medical attention.

**Skin contact** : Wash skin with water. Remove contaminated clothing as washing proceeds. Obtain medical attention if blistering occurs or redness persists.

**Eye Contact** : Immediately flood the eye with plenty of water for at least 10 minutes, holding the eye open. Obtain medical attention urgently.

#### Effects and symptoms

**Inhalation** : Exposure to dust may have the following effects:- severe irritation of nose, throat and respiratory tract. chest pains. bronchospasms. pulmonary oedema.

**Ingestion** : Aspiration during swallowing or vomiting may severely damage the lungs.  
 Swallowing may have the following effects:- irritation of mouth, throat and digestive tract. gastrointestinal irritation.

**Skin contact** : Material will cause severe irritation and may cause chemical burns. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis.

**Eye Contact** : Dust will cause conjunctival irritation and possibly corneal damage.

**Aggravating conditions** : Acute oral toxicity, LD50: >5000 mg/kg [Rat]  
 Acute intraperitoneal toxicity, LD50: 6207 mg/kg [Mouse]

**Notes to physician** : Following ingestion, treat with milk of magnesia and water.

## 5. Fire-fighting measures

### Extinguishing Media

**Suitable** : Select extinguishing agent appropriate to other materials involved.

**Unusual fire/explosion Hazards** : Hazardous Combustion Products : SULPHURIC ACID, SULPHUR DIOXIDE

This product may give rise to hazardous fumes in a fire.

**Hazardous thermal (de)composition products** : Heating may produce: oxides of sulphur. toxic and acidic fumes.

**Special fire-fighting procedures** : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

**Protection of fire-fighters** : Wear full protective clothing and self-contained breathing apparatus.

## 6. Accidental release measures

**Personal Precautions** : Wear appropriate protective clothing. Wear respiratory protection. Ventilate the area to disperse possible toxic decomposition fumes.

**Environmental precautions and cleanup methods** : Sweep up into suitable containers for recovery or disposal. Finally flush area with plenty of water.

: Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

## 7. Handling and storage

**Handling** : Use in well ventilated area. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash facilities should be readily available.

**Storage** : Storage area should be: cool, dry, well ventilated.  
The product is available in paper sacks. Store on pallets away from moisture and contact with steam pipes.  
Do not store in:- mild steel, metal drums.

### Packaging materials

**Recommended use** : Use original container.

## 8. Exposure controls/personal protection

**Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Workplace Exposure Limits</u>
1) ALUMINIUM TRISULPHATE, HYDRATED	Supplier's recommended limit: TWA: 2 mg/m <sup>3</sup>

### Personal protective equipment

**Respiratory system** : Dust respirator.

**Skin and body** : Wear: dust-proof overall with hood, rubber boots.

**Hands** : PVC or rubber gloves.

**Eyes** : Chemical goggles.

## 9. Physical and chemical properties

**Physical state** : Solid. Crystals.

**Colour** : White.

**Odour** : Insignificant

**Boiling point** : Decomposes

**Melting point** : 770

**Density** : 1.69 g/cm<sup>3</sup>

**Solubility** : 430g/100cc

**pH** : 3.0 - 3.6 (1% solution)

**Flash point** : Not available.

## 10. Stability and reactivity

**Stability** : The product is stable.

**Materials to avoid** : Alkalis, water, chlorite, hypochlorite, sulphite, oxidising agents, cyanides, unalloyed steel, galvanised or aluminium surfaces.

**Hazardous decomposition products** : Heating may produce: oxides of sulphur. toxic and acidic fumes.

## 11. Toxicological information

### Local effects

**Skin irritation** : Hazardous in case of skin contact (irritant).

**Eye irritation** : Hazardous in case of eye contact (irritant).

**Acute toxicity** : Low order of acute toxicity.

**Chronic toxicity** : Acute oral toxicity, LD50: >5000 mg/kg [Rat]  
Acute intraperitoneal toxicity, LD50: 6207 mg/kg [Mouse]

## 12. Ecological information

**Ecotoxicity** : On contact with water, aluminium sulphate will hydrolyse to give dilute sulphuric acid and gelatinous aluminum hydroxide. Discharge to the aquatic environment should be avoided since it may lead to localised adverse effects arising from the product's physical properties. The clogging of tentacles, gills and filters of suspension feeders and the modification of the photosynthesis of algae and plankton may result from the presence of suspended particles and turbidity. The product is an inorganic substance/preparation. During hydrolysis, a precipitate is formed of metal hydroxide in the pH range 5 to 7. Due to this reaction the pH in the water phase decreases. If phosphates are present, metal phosphate complex may form.

## 13. Disposal considerations

**Methods of disposal ; Waste of residues ; Contaminated packaging** : Dispose of in accordance with all applicable local and national regulations.

**Waste Classification** : Not applicable.

## 14. Transport information

### International transport regulations

**UN :** **UN number** Non hazardous for transport.

## 15. Regulatory information

### EU Regulations

**Hazard symbol(s)** :



**Classification** : Irritant

**Risk Phrases** : R36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases** : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28 After contact with skin, wash immediately with plenty of water.  
S37/39 Wear suitable gloves and eye/face protection.  
S38 In case of insufficient ventilation, wear suitable respiratory equipment.

**Product Use** : Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use.  
- Consumer applications.

## 16. Other information

### HISTORY

**Date of printing** : 26/02/2009.

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### Notice to Reader

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*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*