

MATERIAL SAFETY DATA SHEET

ALUMINIUM SULPHATE

SECTION 1 IDENTIFICATION

Trade Marks and Synonyms (if any)

**Alum - Slab, Kibbled, Powder,
Granulated.**

Chemical Names and Synonyms

Aluminium Sulphate

Physical Form

White Crystalline Solid

Chemical Formula

$Al_2(SO_4)_3 \cdot nH_2O$

CAS NO.: 17927-65-0

Responsible Person :

DALIAN HEFU TRADING CO., LTD.

Emergency Telephone :

0411-39552835

SECTION 2 INFORMATION ON INGREDIENTS

Ingredients Classification CAS Number

$Al_2(SO_4)_3$ 48 - 58% Irritant 10043-01-3

H_2O 42-52% None

SECTION 3 HAZARDS IDENTIFICATION

Risk of damage to eyes. Prolonged contact with skin may cause possible dermatitis.

Occupational Exposure Limit (OEL): TLV = 2 mg (Al)/m³ as TWA.

SECTION 4 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour : **White Crystalline Solid**

pH 2.5 Concentration: 72 - 91 g/kg Al (14 - 17 % as Al_2O_3)

Boiling Point (deg. C)

N/A

Melting Point (deg. C)

N/A

Flash Point (deg. C)

None

Specific Gravity

1.34 @ 15 degC

Autoignition (deg. C)

None

Flammable Limit (% by Vol. in Air)

Non flammable

Vapour Pressure (mm Hg)

N/A

Solubility in Water

Totally Soluble

Solubility in Other Solvents Oxidising Properties

SECTION 5 STABILITY AND REACTIVITY

Stability Unstable

Stable X

Conditions to Avoid

Incompatibility (Materials and Conditions to Avoid) **Some oxidising agents, eg**

Chlorites and Hypochlorites. Attacks most metals liberating Hydrogen.

Hazardous Decomposition Products

Could emit toxic oxides of Sulphur when heated to decomposition.

SECTION 6 TOXICITY DATA

Acute effects of over exposure when :

In contact with skin **Irritant - after prolonged contact with skin produces sores and possible dermatitis.**

In contact with eyes : **Irritates immediately and could cause severe damage which could lead to permanent visual defects or even total loss of vision.**

Inhaled : **May cause irritation to the mucous membrane of the respiratory tract.**

Ingested : **Very astringent to mouth, nose and throat, normally followed by rapid expectoration.**

Long Term Exposure: **Aluminium accumulates in the brain tissue, resulting in seizures and brain dysfunction.**

Toxicity Data: **LD₅₀ 6207mg/kg (Oral-Mouse)**

Ref: MSDS/A02. Rev: 2

15/10/04

According to EC Directive 91/155/EEC

SECTION 7 FIRST AID MEASURES

Skin Contact : **Remove contaminated clothing and wash affected area with copious quantities of water. Seek medical advice if irritation persists.**

Eye Contact : **Immediately irrigate with water for at least 10 minutes.**

Seek medical attention.

Inhalation : **Remove to fresh air, loosen clothing and seek medical advice.**

Ingestion : **Provided patient is conscious wash out mouth with water**

and give 5% Sodium Bicarbonate solution followed by a demulcent such as milk. Seek medical advice immediately.

Further Medical Advice : **If in doubt seek medical attention.**

SECTION 8 FIRE AND EXPLOSIVE HAZARD DATA

Would any material saturated **YES**
with this product be subject to

spontaneous combustion ? NO X

Materials :

Fire Extinguishing Data

Water or dry powder may be used in the vicinity of Aluminium Sulfate, keep containers cool with copious amounts of water.

Fire Fighting Protective Equipment

Wear full protective clothing.

Unusual Fire and Explosive Hazards

In contact with metals, Aluminium Sulfate may liberate the flammable gas Hydrogen.

SECTION 9 PERSONAL PROTECTION

General Precautions : **Eye and skin protection should be used when handling Aluminium Sulphate.**

Ventilation Requirements :

None

Respiratory Protection :

Wear dusk mask.

Protective Clothing

Gloves and Acid resistant footwear are essential.

Eye protection :

Goggles or full face mask.

SECTION 10 HANDLING AND STORAGE

Handling : **Avoid contact with skin and eyes**

Keep away from metals, organic materials, nitrates, chlorates and carbides.

Storage : **No special handling equipment. Minimise**

SECTION 11 SPILLAGE/ACCIDENTAL RELEASE

Small Spillage : **Wash away with large quantities of water.**

Large Spillage : **Neutralise with Lime or Soda Ash then dispose of according to local regulations. Water can be used if washings can go to drain.**

Personal Precautions : **Wear full protective clothing.**

Neutralising Chemicals : **Hydrated Lime or Soda Ash.**

SECTION 12 WASTE DISPOSAL

Neutralise with Lime and Landfill in accordance with Local Regulations.

SECTION 13 ENVIRONMENTAL INFORMATION

Environmental Fate and Distribution

High tonnage material produced in wholly contained systems.

High tonnage material used in partially contained systems.

The substance is soluble in water.

Persistence and Degradation

Unlikely to cause harmful effects.

Remains indefinitely in the environment as Hydroxide.

Toxicity Large discharges may contribute to the acidification of water and soil and will injure aquatic life and soil micro - organisms.

Effect on Effluent Treatment

Large discharges may contribute to the acidification of effluent treatment systems and will injure treatment organisms. The product is a primary coagulant and may cause solid settlement in treatment systems.

SECTION 14 REGULATORY INFORMATION

EEC Classification: Irritant Hazard Symbol: Xi

Risk Phrases **Risk of serious damage to eyes (R 41).**

Safety Phrases : **In case of contact with eyes, rinse immediately with plenty of water and seek medical advise. (S 26).**

After contact with skin, wash immediately with plenty of water. (S 28).

Wear suitable gloves (S 37)

SECTION 15 TRANSPORT INFORMATION

UN No. **NR** UN Pack. Group **ICAO/IATA Class: NR**

IMDG Class NR ADR/RID Class NR ADR/RID Item

SECTION 16 OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.