

IDENTIFICATION

Name:	Aluminium Sulphate
Grade:	Powder
Synonyms:	Alum
CAS Name:	Aluminium Sulphate
Chemical Family:	Inorganic alkali
Formula:	$Al_2(SO_4)_3$
CAS Registry No.:	10043-01-3

PHYSICAL and CHEMICAL PROPERTIES

Relative Density:	1.53 – 1.83 g/ml
Vapour Density:	Not volatile
Vapour Pressure:	Not volatile
Solubility in H ₂ O:	Completely soluble in/with water.
Form:	Solid
Appearance:	Powder
Colour:	Yellowish-brown to white
Odour:	None
pH Information:	About 3.4 (at 6%)

SPECIFICATIONS

Al ₂ O ₃	17% min.
Fe ₂ O ₃	0.01% max
Insoluble matter	0.5% max
Free Acid	0.1% max
SO ₃	38% min.

STABILITY AND REACTIVITY

Stability
Stable under ambient conditions.

Hazardous reaction (conditions to avoid)
On heating toxic fumes of sulphur oxides and aluminium oxides are released.

Materials to avoid
May corrode metals in presence of moisture.

Hazardous decomposition products

Aluminium sulphate may be hydrolysed to form sulphuric acid.

FIRST AID MEASURE

- Eye Contact: Immediately flush eyes with plenty of clean water for at least 16 minutes. Move eyeball and keep eyelids wide open and apart whilst irrigation. Obtain medical attention immediately.
- Skin Contact: Remove contaminated clothing. Immediately wash affected skin with plenty of water.
- Inhalation: Unlikely. Remove to fresh air, obtain medical attention. Moderately irritating to respiratory tract, and has been shown to be associated with asthma-like problems.
- If Swallowed: Drink a lot of water. Call a physician. Do not induce vomiting. Never give anything by mouth to an unconscious person. Ingestion may result in ulceration and necrosis of the mouth, throat and oesophagus, epigastric, diarrhoea, thirst, haemorrhagic gastroenteritis and circulatory collapse.

FIRE FIGHTING MEASURES

- Special Hazard: Not flammable unless in dusty environment
- Protective Equipment: Wear goggles, self-contained breathing apparatus and rubber over-clothing (Including gloves).
- Extinguishing Agents: Extinguish with dry chemicals or carbon dioxide
- Additional Information: DO NOT USE WATER ON FIRE

ACCIDENTAL RELEASE MEASURES

- Personal precautions: Avoid contact with liquid and vapour. Keep people away. Water goggles, self-contained breathing apparatus and rubber overclothing (including gloves). Shut off Ignition sources. Call fire department.
- Environmental precautions: Stop discharge if possible. Isolate and remove material. Notify local health and pollution control agencies.
- Method for cleaning up: Wash with plenty of water.

HANDLING AND STORAGE

- Handling: Local ventilation to prevent dust generation and fire.
- Storage:-
Requirement for storage rooms: Keep PP bag tightly closed.
Additional information: Recommended self-life for unopened PP bag 6 months after receipt.
- Materials not to be stored together: Keep away from acids and metals.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information on technical system design

Technical measures: Use local exhaust ventilation if there is a risk of inhalation of dust.

Personal protection

Respiratory protection: Wear breathing apparatus

Eye protection: Wear goggles. Have eye-wash facility available.

Hand protection: Wear rubber gloves.

Body protection: Wear impervious apron.

TOXICOLOGICAL INFORMATION

Aluminium sulphate is of low oral toxicity. It is however readily hydrolysed to form sulphuric acid, which is an irritant to the lungs and other tissues.

Carcinogenicity No evidence of carcinogenic properties.

Mutagenicity No evidence of mutagenic effects.

DISPOSAL CONSIDERATIONS

To licensed waste disposal contractor.

This material safety data sheet and the information it contains is offer to you in a good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believed that the information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in the data sheet may not be adequate for all individuals and/ or situation. It is the user's obligation to evaluate and use this product safety and to comply with all applicable laws and regulation. No statement made in this data sheet shall be constructed as a permission or recommendation for the use of any product in a manner the might infringe existing patents. No warranty is either made express or implied.
