

MOHAMMAD NAZIR CHAUDHRY CHEMICAL PRODUCTS CO. LTD

P. O. Box: 23941 Jeddah - 21436, Saudi Arabia
Ph: 00966 50 6342946, (02) 6445388 - Fax: 00966 (02) 6445722
Email: info@mncp.com.sa Website: www.mncp.com.sa
Project Location: Phase 2, Industrial Estate, Rabigh – Saudi Arabia

MATERIAL SAFETY DATA SHEET ALUMINIUM SULPHATE

1. Product and Company Identification

<u>Trade / Commercial Name</u>	ALUMINIUM SULPHATE
<u>Chemical Name</u>	Aluminum Sulphate – solid CAS NO.10043-01-3
<u>Formula</u>	Al ₂ O ₁₂ S ₃
<u>Chemical Family</u>	
<u>Synonyms</u>	Sulfuric Acid, Aluminum Salt (3:2); Dialuminum Sulfate
<u>Un No</u>	8207 <u>Hazchem Code</u>
<u>ERG No</u>	171 <u>EAC</u>

2. Composition

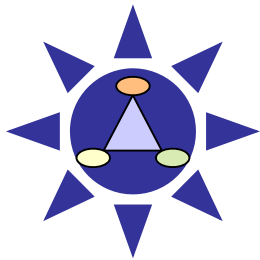
<u>Hazardous Components</u>	Aluminium Sulphate Al ₂ (SO ₄) ₃ = 48 – 58 % Water = 42 – 52%
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3. Hazards Identification

Fire could produce irritating or poisonous gases.
Runoff from fire-control water or dilution water could cause pollution.
Occupational Exposure Limit (OEL) TLV=2mg (Al)/m³ as TWA

4. First Aid Measures

<u>First Aid Skin</u>	Immediately remove contaminated clothing, including shoes. Wash affected area with plenty of soap and water for at least 20 minutes.
<u>First Aid Eyes</u>	Flush eyes with water for 15 minutes. Hold eyelids open while washing.
<u>First Aid Ingested</u>	Provide patient in conscious wash out mouth with water and give 5% sodium Bicarbonate solution followed by a demulcent such as milk. Seek medical



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advise immediately.

First Aid Inhalation

Remove to fresh air, loosen clothing and seek medical advise

5. Fire Fighting Measures

SMALL FIRES: Dry chemical, CO₂, Halon, water spray or standard foam.

LARGE FIRES: Water spray, fog or standard foam is recommended. Move container from fire area if you can do it without risk. Cool containers that are exposed to flames with water from the side until well after the fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Self-contained breathing apparatus (SCBA) and structural firefighter's protective clothing will provide limited protection.

6. Accidental Release Measures

Breathing apparatus for fire only

Dilute (substance may be washed to drain with a lot of water)

PRECAUTIONS:

Restrict access to area.

Provide adequate protective equipment and ventilation.

Remove sources of heat and flame.

Notify occupational and environmental authorities.

SPILL OR LEAK:

Shut off ignition sources; no flares, smoking or flames in hazard area.

Keep combustibles (wood, paper, oil, etc) away from hazard area.

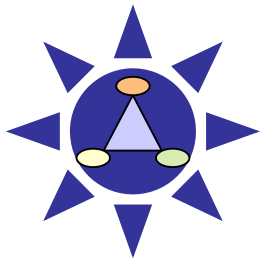
Do not touch spilled material.

SMALL SPILLS:

Take-up with sand or other noncombustible absorbent material and place into containers for later disposal.

LARGE SPILLS:

Dike far ahead of liquid spill for later disposal.



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7. Handling And Storage

Storage in the same room or space is prohibited with the following classes:
The rooms or spaces should be at least 10M apart Explosives.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits No Exposure Limits Established – No spontaneous combustion

Controls

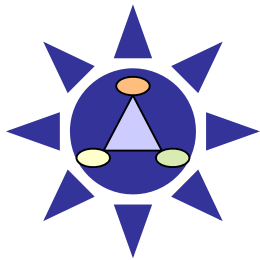
The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure.
The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release.
Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside.
Supply sufficient replacement air to make up for air removed.
Have a safety shower/eye wash fountain readily available in the immediate work area

Personal Protection

If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment, including chemical safety goggles & face shield, boots, imperious gloves, coveralls, & respiratory protection. Have appropriate equipment available for use in emergencies.

9. Physical & Chemical Properties

Appearance & Color	=	White crystalline / powder
pH (10% Solution)	=	2.5 – 3.5
Concentration	=	72-91 g/Kg Al (16 – 17 % as Al ₂ O ₃)
Specific Gravity	=	1.34 @ 15 c



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Solubility in water = Sparingly Soluble
Flammability Limit (% by vol. in air) = NON FLAMMABLE
Auto ignition = NONE
Flash Point = NONE

10. Stability And Reactivity

Stability = stable

Conditions to Avoid

Incompatible Materials

Some Oxidizing Agent .eg Chlorites & Hypochlorite

Other

Attack most metals Liberating Hydrogen

Could emit Toxic Oxides of Sulphur when heated to decomposition.

11. Toxicological Information

SKIN & EYES :- Irritant to skin – after prolonged contact with skin produces sores and possible dermatitis. In eyes it 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 :- Aluminum accumulates in the brain tissue, resulting in seizure and brain dysfunction

TOTICITY DATA :- LD 50 6207 mgkg-1 (oral-mouse)

12. Ecological Information

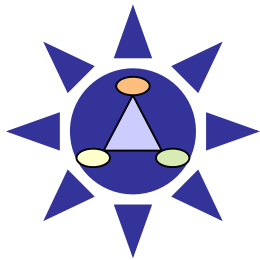
No ecological problems are expected when the product is handled and used with due care.

13. Disposal Considerations

Disposal Method Product

There are no uniform EC regulations for the disposal of chemicals or residues.

Chemical residues generally count as special waste.



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The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations.

We recommend that you contact the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Disposal Method Packaging Disposal in accordance with local legal provisions.

14. Transport Information

<u>UN No</u>	8207	<u>Hazchem Code</u>	1[T]
<u>ERG No</u>	171	<u>EAC</u>	11

<u>IMDG Code</u>	9
<u>Marine Pollutant</u>	True
<u>Class</u>	Class: 9 Miscellaneous
<u>Subsidiary Risks</u>	None
<u>Tremcard Number</u>	CEFIC

15. Regulatory Information

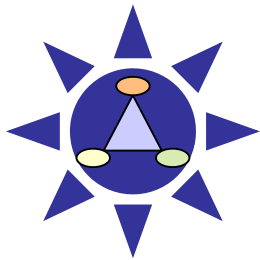
<u>EEC Hazard Classification</u>	9 Hazard Symbol : Xi
<u>Risk Phases</u>	Danger of cumulative effects. Damage to Eyes (R 41)

<u>Safety Phases</u>	This material and its container must be disposed of in a safe way
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National Legislation

16. General Use of the Product & other Information

Aluminum Sulphate is generally used as flocculating & coagulating Agent in the drinking Water & Waste Water Treatment process. Sizing of paper, Water proofing, Leather tanning, Fire Proofing, Manufacture of Medicines, As a mordant in Textile & dyeing, Photographic Process, As a Cattle Feed and Soil Conditioner in Agriculture.



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