



White Alum Lump (Ammonia Alum), Packaging Type: Drum/Barrel

by:Alnoora Industries, Ahmedabad

Product Specifications

Purity	98.9 %
Packaging Type	Drum/Barrel
Usage/Application	Purifying and Dyeing Purposes



Amar Alum & Allied Chemicals Pvt. Ltd.

Purifying Water. Empowering Lives.

COMPANY PROFILE

About Us

Established in 1991 by my late father, Shri Nand Lal Garg, Amar Alum has risen to become the foremost manufacturer of Ferric Alum (Alumino Ferric, compliant with IS 299) in all grades 1, 2, 3, 4, and 5, distinguished by our prestigious BIS License.

With a substantial annual production capacity exceeding 70,000 MT, we proudly claim the position of the country's largest manufacturer. With over 30 years of experience in the industry, our company enjoys an unblemished reputation in the market, assuring a reliable supply of raw materials, even in the face of challenging circumstances, making us a dependable partner throughout the year.

Amar Alum, a family-run establishment, is led by the wise stewardship of Mrs. Poonam Garg, with Karan Garg, a Civil Engineering graduate from BITS Pilani, and Aditi Sharma Garg, who holds a Master's degree from RWTH Aachen University in Germany, combining expertise in both Management and Engineering.

PRODUCT BROCHURE

Exceptional Qualities of Ferric Alum

Ferric Alum (Alumino Ferric) is a dual coagulant, combining the advantages of Aluminum Sulphate and Iron Sulphate. This unique blend makes it a superior and cost-effective choice compared to other coagulants such as Non Ferric Alum and PAC.

- Notably, Ferric Alum is approximately 20% more affordable than Non-Ferric Alum/PAC, making it a cost-efficient option.
- Its effectiveness in water treatment, purity, and reduced Alum consumption set it apart.

Quality Manufacturing

High levels of Insolubles can lead to numerous issues, including:

- Choking of pumps and pipelines.
- Frequent cleaning of solution tanks.



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- Reduced efficiency in water treatment, potentially leading to ineffective results.

We strictly employ a Hot-Process method supported by a Boiler to manufacture Alum with an Insoluble Matter content of less than 0.4%.

The Vital Role of Ferric Sulphate in Water Treatment

Ferric Sulphate plays a pivotal role, making the Alumina Ferric manufactured by us a superior coagulant compared to NFA/PAC. Here's why:

- Ferric Sulphate effectively operates over a wide pH range (4.0 to 11.0), allowing for both colour removal in raw water at low pH values and the removal of heavy metals at high pH values.
- At elevated temperatures, the hydrolysis rate of Ferric Sulphate increases, enhancing its coagulation efficiency, especially in subtropical/temperate regions.
- In lower-temperature conditions, the use of Ferric Sulphate leads to improved turbidity removal, resulting in more efficient treatment of natural organic matter.
- Ferric Sulphate exhibits higher binding ability and lower charge density than aluminum sulphate under similar conditions, highlighting its exceptional coagulation properties.
- Its rapid hydrolysis in water forms Ferric Hydroxide ($\text{Fe}(\text{OH})_3$), which readily precipitates and is minimally soluble across a wide pH range (5 to 9) and various untreated water temperatures. This unique attribute makes Ferric Sulphate a sought-after coagulant in 'Alumino Ferric' or Aluminium Iron (III) Sulphate.
- Being heavier than Al, Fe flocs reduces coagulant dosages and dosing time - speeding up the treatment time as well.

For any inquiries or to experience the superior quality of our Ferric Alum, please don't hesitate to contact us. We look forward to serving your needs with dedication and expertise.

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Aditi Sharma Garg
CMO
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Requirement for Alumino-Ferric	
<u>TECHNICAL DATA SHEET</u>	
As per the IS 299:2012	
Description/Specifications	Requirements
Color	White to off-White
Insoluble Matters,% by mass, Max	0.40%
Soluble Iron Compounds(Fe)% by mass, Max.	0.70%
Water Soluble Aluminum Compounds (Al ₂ O ₃)% by mass, Min.	16%
pH Min	2.7
Basicity,% by mass, Max.	0.50%
Lead(Pb), ppm, Max	<8
Arsenic(As ₂ O ₃), ppm, Max	<4
Mercury(Hg), ppm, Max	0.4
Manganese(Mg), ppm, Max	<20
Chromium(Cr), ppm, Max	20
Cadmium(Cd), ppm, Max	2
Selenium(Se), ppm, Max	4
Phenolic Compounds(C ₆ H ₆ O)	0.4
Anionic detergents(MBAS), ppm, Max	80



YAAMI TRADING COMPANY

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Bareilly, UP-243001, Tel:8006669900
GSTIN: 09BVBPA7986A1ZN
Email: yaamitradingco@gmail.com

April 19, 2024

Analysis Report (Ferric Alum Solid Grade-4)

To, Deximco Tenigram SL. BD.,

Contract No.: Telephonic Batch No.: 202404-19A Date of Manufacturing: 18.04.2024

For better results material should be consumed within 2 months from manufacturing.

Truck No.: NA

Qty. : 1 KGs

S.No.	Description/Specifications	Requirements	Findings/Results
1.	Color	White to off-White	White
2.	Insoluble Matters,% by mass, Max	0.4%	0.31%
3.	Soluble Iron Compounds(Fe)% by mass, Max.	0.7%	0.3%
4.	Water Soluble Aluminum Compounds(Al_2O_3)% by mass, Min.	16%	16.91%
5.	pH Min	2.7	2.72
6.	Basicity,% by mass, Max.	0.5%	(Basicity)0.25%
7.	Lead(Pb), ppm, Max	<8	<2
8.	Arsenic(As_2O_3), ppm, Max	<4	<1
9.	Mercury(Hg), ppm, Max	0.4	Not Detected
10.	Manganese(Mg), ppm, Max	<20	13.33
11.	Chromium(Cr), ppm, Max	20	Not Traceable
12.	Cadmium(Cd), ppm, Max	2	Not Detected
13.	Selenium(Se), ppm, Max	4	Not Detected
14.	Phenolic Compounds(C_6H_6O)	0.4	0.016
15.	Anionic detergents(MBAS), ppm, Max	80	13.22

Remarks: The material confirms to IS 299:2012 as per amendment No.1 and 2.

Kind Regards,

Yaami Trading Company
For Yaami Trading Company

Yash Arora
(Proprietor)
800666900

Material Safety Data sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name : Ferric Alum Solid / Alumina Ferric

Recommended Use : Water treatment, flocculant, pH control, paper and pulp, deodorising agent, fire retardant, foam boosting, dyes, mordant, printing fabric, catalyst.

Supplier : Yaami Trading Company

Mobile Number : 80066 69900

2. HAZARDS IDENTIFICATION

NOT-CLASSIFIED AS DANGEROUS GOODS.

Risk Phrases : Irritating to eyes and skin.

Safety Phrases : Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/ face protection.

Poisons Schedule : None allocated.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Aluminium sulphate & Ferric sulphate

4. FIRST AID MEASURES

Inhalation: Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible, either on site or at the nearest hospital.

Skin Contact: If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion: Rinse mouth with water. Seek medical advice. If swallowed, do NOT induce vomiting. Give a glass of water.

Medical Attention and special treatment: Treat symptomatically

5. HANDLING AND STORAGE

Conditions for safe storage: Store away from incompatible materials described in Section 10. Store under cover in a dry place. Keep containers closed when not in use- check regularly for spills.

Precautions for safe handling: Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation.

6. EXPOSURE CONTROLS / PERSONAL PROTECTION

Aluminium, soluble salts (as Al) : 8 hr TWA= 2 mg/m³

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering controls:

Ensure ventilation is adequate and that air concentration of components is controlled below quoted Exposure Standards. Avoid generating and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal Protective Equipment:

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Personal Protection Guide F-OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Avoid generating and inhaling dusts. If dust exists, wear dust mask always wash hands before smoking eating drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

7. PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Solid
Colour : White to Light Tan
Odour : Negligible

Molecular Formula	:	$\text{Al}_2(\text{SO}_4)_3 \cdot 16\text{H}_2\text{O}$
Solubility	:	Miscible with water
Specific Gravity	:	2.71 @ 20 °C
Flash Point (°C)	:	Not applicable
Solubility in water (g/L)	:	870 g/L
Decomposition Point (°C)	:	770

8. STABILITY AND REACTIVITY

Chemical Stability	:	Will absorb moisture from the atmosphere.
Conditions to avoid	:	Avoid exposure to moisture. Hygroscopic – adsorbs moisture from the air.
Incompatible materials	:	Incompatible with alkalies. Incompatible with oxidising agents.
Hazardous decomposition Products	:	Oxides of sulphur. Oxides of aluminium.
Hazardous reactions	:	Hazardous polymerisation will not occur. May react with some metals in the presence of moisture.

9. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion	:	Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation.
Eye contact	:	An eye irritant.
Skin contact	:	Contact with skin will result in irritation.
Inhalation	:	Breathing in dust may result in coughing. Breathing in dust may result in respiratory irritation.

Long Term Effects:

No information available for the product.

10. ECOLOGICAL INFORMATION

Ecotoxicity: Avoid contaminating waterways

11. TRANSPORT INFORMATION

Not classified as Dangerous Goods for transport by

Road and Rail : NON DANGEROUS GOODS.