



PT. MAHKOTA INDONESIA

Office & Factory : Jalan Raya Bekasi Km. 21 Pulogadung - Jakarta Utara 14250, Indonesia
Telephone : 6221 - 4603121 (Hunting) Faximile : 6221 - 4602792
Website : www.mahkotaindonesia.co.id
Manufacturing of Sulphuric Acid, Aluminium Sulphate, Oleum, Sodium Silicate, Sulphur Block, etc.



M S D S No. 003 – MI – 2008 (SDS Alumunium Sulphate)

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DATE PREPARED : April 6th, 2008

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

- **PRODUCT NAME** : **Alumunium Sulphate Solid**
- **COMPANY NAME** : PT. MAHKOTA INDONESIA
- **ADDRESS** : Jl. Raya Bekasi Km.21. Pulogadung.
Jakarta Utara. 14250
- **TEL NO.** : 62-21-4603121 (Hunting)
- **FAX NO.** : 62-21-4602792
- **EMERGENCY TEL NO.** : 62-21-4603121 (Hunting)

2. HAZARD IDENTIFICATION

GHS CLASSIFICATION

- Self Reactive Substances : Not Classified (No information found)
- Acute Toxicity
 - Oral : Not Possible to Classified
 - Dermal : Not Classified (No information found)
 - Inhalation : Not Classified (No information found)
- Skin Corrosion/Irritation : Category 2 (Exclamation Mark, Warning)
- Serious Eye Damage /Irritation : Category 2A (Exclamation Mark, Warning)
- Respiratory Sensitization : Category 1 (Health Hazard, Danger)
- Specific Target Organs : Category 2 (Health Hazard, Warning)
(Repeated Exposure)

GHS LABEL ELEMENT





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HAZARD STATEMENTS

Human Effect :

- Harmful if swallowed or inhaled
- Sharp Edges will cut skin
- Large dust particles may scrape eye surface
- Causes skin irritation and eye irritaton
- A strong alkaline irritant causes severe irritation to eyes, skin and respiratory tract
- May cause respiratory irritation
- Cause damage to organs (nervous system, respiratory system) through prolonged or repeated exposure
- Harmful to Aquatic life in very low concentrations

PRECAUTIONARY STATEMENTS

- Avoid contact with skin and eyes
- Do not inhale vapour or spray
- Do not ingest
- Wear respiratory protection, protective glove/clothing/face protection as specified by manufacturer/supplier or the competent authority
- Wear eye protection (chemichal goggles)
- Keep container tightly closed
- Due the lower vapour pressure of this product (can hydrolyses to form sulfuric acid)
- Protective clothing or contaminated work clothing should not be allowed out of the workplace
- Wash hand thoroughly after handling
- Do not eat, drink or smoke when using this product
- Avoid release to the environment
- Do not handle until all safety precaution have been read and understood.
- This substance may be hazardous to the environment, special attention should be given to fish

3. COMPOSITION / INFORMATION ON INGREDIENTS

- CHEMICAL NAME : Alumunium Sulphate
- SYNONYMS : Alum; Sulphate of alumina, Sulfate of alumina, Alum kibbled, Kibbled alum, Ground alum, Granular alum, Alumunium Sulphate solid.
- CHEMICAL FORMULA : $Al_2(SO_4)_3 \cdot xH_2O$

Ingredient	CAS No.	Percent WT
Alumunium Sulphate	10043-01-3	Min 17 %



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4. FIRST-AID MEASURE

- **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 doctor as soon as possible.
- **Ingestion** :
Rinse mouth with water. If swallowed give a glass of water to drink. If vomiting occurs give further water. Seek medical advice.
- **Skin Contact** :
If skin or hair contact, 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.

5. FIRE-FIGHTING MEASURES

- **Specific Hazard** :
Non Combusting material.
- **Fire Fighting Advice** :
Decomposes on heating emitting toxic fumes, including those of oxides of sulfur. Fire fighters to wear self – contained breathing apparatus and suitable protective clothing if risk of exposure to products decomposition.
- **Suitable Extinguishing Media** :
Not combustible, however, if material is involved in a fire use: Dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions** :
Wear protective equipment to prevent skin and eye contact and breathing dust. Work up wind or increase ventilation. Cover with damp absorbent (inert, material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labeled containers or drum for disposal.
- **Methods for cleaning up** :
Wash area down with excess water.



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7. HANDLING AND STORAGE

- **Handling** :
Avoid skin and eye contact and breathing in dust.
- **Storage Color Code** :
Green (General Storage)
- **Storage Advice** :
Store in cool place, dry place and out of direct sunlight. Store away from incompatible materials described. Keep containers closed when not in use-check regularly for spills.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- **ENGINEERING MEASURES** :
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure standards. Avoid and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.Minimize and/or control dust while handling.
- **CONTROL PARAMETERS** :

CHEMICAL NAME	CAS RN	ACGIH (1995-1996)	OSHA (1995)	% 100.0 (by wt)
Alumunium Sulphate	10043-01-3	TWA	2 mg/m ³ / (%Al)	Min 17 %

- **PERSONAL PROTECTIVE EQUIPMENT** :
 - RESPIRATORY PROTECTION :
Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator.
 - HAND PROTECTION :
Chemical resistant gloves
 - EYE PROTECTION :
Wear safety glasses with side shields or chemichal goggles and a full face shield.
 - SKIN, AND BODY PROTECTION :
Suitable safety clothes and shoes



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9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : Solid
- Color : White to light Tan
- Odor : None
- pH : 2.25 – 3.25 ± 0.5
- Solubility in water : 10 g/100 cc Water @ 30 °C (86 °F)
- Spesific Gravity : ± 1.7 @ 17 °C/4 °C
- Boiling Point : Not Applicable
- Melting Point : 87 °C (189 °F) decomposes
- Vapour Density (Air = 1) : Not Applicable
- Vapour Pressure (mmHg) : Not Applicable
- Evaporation Rate (BuAc = 1) : No information found

10. STABILITY & REACTIVITY

- **Hazardous Decomposition Products :**
May includes oxide of sulphur
- **Incompatibilities :**
Incompatible with alkalis and oxidizing agent.
- **Conditions to Avoid :**
Incompatibles.

11. TOXICOLOGICAL INFORMATION

- **Acute Toxicity :**

Oral mouse LD₅₀ 6207 mg/kg

- **Cancer List :**

INGREDIENT	CAS NO.	NTP CARCINOGEN KNOWN	NTP CARCINOGEN ANTICIPATED	IARC
Alumunium Sulphate	10043-01-3	No	No	None
Water	7732-18-5	No	No	None



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12. ECOLOGICAL INFORMATION

- **Environmental Fate** :
Avoid contaminating waterways.

13. DISPOSAL CONSIDERATION

- **Spill/ Leak Procedures** :
Spill procedures are dictated by site Refer to water waste Management Authority.
- **Large and small spill** :
Sweep and shovel up dryer chemichal and placed in covered container. Wash down residue with large amounts of water and neutralize with soda ash and lime. Neutralization of alumunium sulphate can generate carbon dioxide. Adequate ventilate must be provided.
- **Clean up** :
Wash impacted areas with water to remove residues.

14. TRANSPORT INFORMATION

- **The UN classification number** :
[UNRTDG]
Proper shipping name : Alumunium Sulphate
UN class : No Information Found
UN number : No Information Found
- **Road and Rail Transport** :
Not classified as Dangerous Goods by the criteria of Australian Dangerous Goods Code (ADG)
- **Marine Transport** :
Not classified as Dangerous Goods by the criteria of International Maritime Dangerous Goods Code (IMDG code) for transport by sea.
- **Air Transport** :
Not classified as Dangerous Goods by the criteria of International Air Transport Association (IATA) Dangerous Regulations for transport by air
- Any transportation practice must be in compliance with laws and regulation in your country or region.



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15. REGULATORY INFORMATION

- EU STATUS :

EINECS : Listed (no. 205-438-8)
Classification & Labeling (67/548/EEC) :
[CLASSIFICATION] :
Xn : R20/21/22
Xi : R35/36/37/38

[LABELING]

[F, Xn]

R20/21/22 – Harmful by inhalation, in contact with skin and if inhaled
R35 - Causes severe burns
R36/37/38 - Irritating to eyes, respiratory systems and skin.
S2 - Keep out of the reach of children.
S7 - Keep container in tightly closed
S24/25 - Avoid contact with skin and eyes
S36/37/39 - Wear suitable protective clothing, gloves and eye protecting

16. OTHER INFORMATION

- REFERENCES :
 - 1) Data generated by PT. Mahkota Indonesia
 - 2) Guidebook for GHS Classification and Labelling, March, 2008
 - 3) Purple Book Rev 2, 2007
 - 4) UNRTDG Orange Books 14th edition
 - 5) Dangerous Properties of Material 6th edition, N. Irving Sach, March 1987
 - 6) Hazardous Material in Industry 12th edition
- To the best of our knowledge, the information contained here in is accurate. However, neither PT. MAHKOTA INDONESIA nor any of its subsidiaries assumes any liability what so ever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material. 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 which exist.