

Activated Poly Sodium Metasilicate(APSM)

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Section 1 - Chemical Product and Company Identification

MSDS Name: Activated Poly Sodium Metasilicate

Other names: APSM

Chemical formula: n/a

Company identification: LUKEM (Nanjing) Co., Ltd.

For information, call: 0086-25 85552309

Emergency Number: 0086-25-85552709

For CHEMTREC assistance, call: 00386 1 244 3293

For International CHEMTREC assistance, call: 00386 1 244 3291

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
497-19-8	Sodium bicarbonate	10-20
7757-82-6	Sodium Sulphate	40-50
6834-92-0	Sodium Silicate	20-35

Hazard Symbols: None listed

Risk Phrases: None listed

Section 3 - Hazards Identification

Channel of contacts: inhalation, digestion, eye and skin absorption

Eye contact: able to cause serous irritation, causing conjunctivitis and mechanic damages

Inhalation: when powder or smoke is inhaled, irritation to upper respiratory tract can be cause

Accidental digestion: may cause irritation to gastrointestinal tract, leading to nauseas and vomits.

Skin: may irritate the skin

Material Safety Data Sheet

Section 4 - First Aid Measures

Eye: remove the contaminated clothes and rinse with sufficient water for 15 minutes. Seek immediate medical assistance.

Skin: rinse with sufficient water. Seek medical assistance if irritated feeling persists.

Inhalation: move the patient to a place with good ventilation and keep warm. If respiration halts, give artificial respiration ASAP. If there's difficulty in respiration, supply oxygen. Seek immediate medical assistance.

Section 5 - Fire Fighting Measures

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Possible to decompose and produce toxic smoke

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Water, water spray, foam, carbon dioxide (CO₂), dry powder.

Special Remarks on Fire Hazards: Aqueous solutions or powders that become wet render surfaces extremely slippery.

Special Remarks on Explosion Hazards: Not available.

Section 6 - Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container.

Section 7 - Handling and Storage

Precautions: Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.

Material Safety Data Sheet

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

China

Sodium carbonate: TWA 3 mg/m³; STEL 6 mg/m³

Engineering control: sealed operation. Safe showering and eye washing equipment shall be available.

Protection to respiratory system: anti-dust masks shall be worn.

Protection to skin: wear gloves, boots, aprons, sleeve shields or protective garments.

Protection to eyes: goggles and masks shall be worn.

Others: sprayer and eye washers shall be available at the working area.

Section 9 - Physical and Chemical Properties

Appearance and property: white powder

Melting point (°C): no data

Boiling point (°C): no data

Relative density (water=1): approx. 0.4

Saturated steam pressure (kPa): no data

Water solubility: more than 15g/100mol

Section 10 - Stability and Reactivity

Stability: The product is stable.

Instability Temperature: Not available.

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Conditions of Instability: Not available.

Incompatibility with various substances: Moisture air, strong acid, carbon dioxide

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11 - Toxicological Information

Sodium carbonate: mouse oral LD50: 5899mg/kg

Sodium sulfate: rat oral LD50: 4090 mg/kg; inhalation LC50: 2300 mg/m³/2H

Sodium silicate: rat oral LD50: 1153 mg/kg

Section 12 - Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13 - Disposal Considerations

Waste from residues/unused Products: In accordance with local and national regulations.

Contaminated package: Rinse empty containers with water and use rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

Section 14 - Transport Information

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport

Material Safety Data Sheet

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

Section 15 - Regulatory Information

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Relevant regulations

Constituents

Relevant regulations	Constituents
National Environment Protection General Bureau: List of chemicals currently existent in China	Listed
National Security Supervision Bureau: List of highly toxic substances (version 2002)	Not listed
National Security Supervision Bureau: List of highly hazardous chemicals (version 2002)	Not listed
Identification of major hazardous sources (GB18218-2000)	Not listed
National Environment Protection General Bureau: List of the country's hazardous wastes (1998)	Not listed
Sanitary ministry: List of highly toxic substances (version 2003)	Not listed

Section 16 - Additional Information

MSDS Creation Date: 19/05/2013

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