Material Safety Data Sheet
Activated Alumina

Section 1: Chemical Product and Company Identification

Product Name: Activated alumina
CAS No.: 1344-28-1
Customs Tariff No.: 28182000
Synonym Name: Activated alumina sorbent
Chemical Formula: Al2O3

Contact Information:
Chemtrade International
Rm. 201, Unit 3, Building 8, Shijia Garden, No. 93, Xiangjiang Road, Qingdao Development Zone, Qingdao, Shandong, China 266555
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Tel: 0086-532-86893005
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Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activated alumina(partially hydrated aluminium oxide)</td>
<td>1344-28-1</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

*Hazard class & Risk phrase. These columns are only completed for ingredients which are classified as hazardous under EU Directive (67/548/EEC, as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as “Not applicable”.

Section 3: Hazards Identification

EMERGENCY OVERVIEW
This material when properly handled according to good working and hygienic practices is not dangerous to human health and the environment. However, the material is primarily used as a gas/vapour sorbent. Care should be taken when handling sorbent that has been used in processes involving, corrosive, toxic, flammable, explosive or pyrophoric gases/vapours. Precautions must take account of the hazards associated with the process materials. For short and long term exposure effects see Section 11 Toxicological data.

Eye Effects: Dust may cause irritation.
Skin Effects: May cause irritation.
Ingestion/Oral Effects: No effects established. Material is non toxic.
Inhalation Effects: Dust may cause mild irritation of the respiratory tract.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Excessive dust inhalation may aggravate pre-existing lung conditions.

Section 4: First Aid Measures

Eyes: If dust enters the eye, flush with plenty of water. If irritation persists, seek medical advice.
Skin: Wash with plenty of water *
Ingestion/Oral: Give water to drink. Seek medical advice *
Inhalation: After dust inhalation, remove to fresh air *. If breathing problems occur a qualified individual should administer oxygen or artificial respiration as indicated. Seek immediate medical attention.
Other Information: * If the material is contaminated with process residue, seek medical advice appropriate the materials involved in the process.

Section 5: Fire and Explosion Data

Extinguishing Media: Material does not burn. Use extinguishing media appropriate to other materials in the locality.
Fire and Explosion Hazard: Not applicable.
**Special Protective Equipment for Fire Fighters:** Not applicable.

For Flammability Properties - see Section 9

### Section 6: Accidental Release Measures

Sweep up spilt material. If there is significant dust content, wear respiratory protection and dampen to avoid raising dust.

### Section 7: Handling and Storage

**Handling:** avoid raising dust.

**Storage:** store in clean, dry, air tight containers.

### Section 8: Exposure Controls/Personal Protection

**Exposure Limits:**
- Ingredient: Activated alumina
  - ACGIH – TLV: 10 mg/m$^3$
  - OSHA – PEL: 15 mg/m$^3$ (total) 5 mg/m$^3$ (respirable)
  - Occupational Exposure Limits EH40 (UK) 10mg/m$^3$ (total dust) TWA 5mg/m$^3$ (respirable dust)

**Personal Protection:**
- Engineering Measures: None required.
- Respiratory Protection: Wear dust mask where the material includes significant dust.
- Hand/Skin Protection: Wear gloves.
- Eye/Face Protection: Wear goggles.
- Hygiene Measures: Practice good workplace hygiene. Do not eat or smoke when handling. Wash hands after handling and before eating.
- Other/General Protection: None.

### Section 9: Physical and Chemical Properties

**Appearance and Odour:** Odourless white balls or granules.

**Boiling Point:** Not applicable

**pH (as supplied):** Neutral to slightly alkaline reaction in water

**Melting Point:** 2050/37220°C/0°F

**Solubility in Water:** Insoluble

**Auto Ignition:** Not applicable

**Volatile Content by Volume:** None. Material does absorb gases/vapours which may subsequently be released

**Flash Point:** Not applicable

**Specific Gravity:** 0.8

**Vapour Pressure (mbar):** No data available

**Vapour Pressure (Torr):** No data available

### Section 10: Stability and Reactivity Data

**Stability:** Stable

**Material/Conditions to Avoid:** None known.

**Hazardous Decomposition:** None.

### Section 11: Toxicological Information

For a comprehensive description for the various toxicological (health) effects which may arise if the user comes into contact with the substance or preparation refer to Section 3 Hazards Identification.

**Animal Data:**
- LD50 value: No data available.
- LC50 value: No data available.

**Carcinogenicity:**
No known carcinogenic hazardous effects.

**Section 12: Ecological Information**

Aluminium oxides possess low water solubility. They are chemically inert. In small amounts they are unlikely to pose a threat to aquatic life.

**Section 13: Disposal Considerations**

Dispose of according to national and local regulations. Material is not classified as hazardous, dangerous or toxic. Approved landfill sites can be used.

**Section 14: Transport Information**

This product is not classified as dangerous under transport regulations.

**Section 15: Other Regulatory Information**

**European Regulatory Information**

This product has been classified in accordance with the Dangerous Substances Directive (67/548/EEC, as amended) and the Preparations Directive (88/379/EEC, as amended), implemented in the UK as the Chemical (Hazard Information and Packing) Regulations 1994 (CHIP, as amended).

**United States Regulatory Information**

All ingredients contained in this product are included on the EPA TSCA Chemical Substance Inventory.

**SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:**

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR Part 372.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

**Canadian Regulatory Information**

All ingredients contained in this product are included on the Canadian DSL.

WHMIS Classification: Not Classified

**Section 16: Other Information**

This MSDS is compiled in accordance with ANSI Z400.1 and the EU Safety Data Sheet Directive 91/155/EEC.

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