Material Safety Data Sheet

**ACTIVATED ALUMINA**

**Section 1: Identification of the substance/preparation & company/undertaking**

<table>
<thead>
<tr>
<th>Substance &amp; Preparation</th>
<th>Company/undertaking identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name: Activated Alumina</td>
<td>Identification: Manufacturer &amp; Supplier</td>
</tr>
<tr>
<td>Appearance and odorless: White powder or granules; odorless.</td>
<td>SORBEAD INDIA 305-306, Prayosha Complex, Chhani Jakat Naka, Next to Hyundai Motors Show Room, Vadodara-390024, Gujarat, India.</td>
</tr>
<tr>
<td>Uses: Catalyst support, desiccant, absorbent, adsorbent.</td>
<td>Tel: +91-98-240-50661 Fax: +91-265-2761142</td>
</tr>
<tr>
<td>Synonyms: Activated Alumina Grade A&amp; AA, Alumina Active Grade A &amp; AA, Aluminum Oxide, Alumina Desiccant, Catalyst Alumina, Adsorbent Alumina.</td>
<td>E-mail: <a href="mailto:sales@sorbeadindia.com">sales@sorbeadindia.com</a></td>
</tr>
<tr>
<td>Chemical Name: Aluminium Oxide</td>
<td>Order Online: <a href="http://www.sorbeadindia.com">www.sorbeadindia.com</a></td>
</tr>
<tr>
<td>Chemical Formula: Al₂O₃</td>
<td>Emergency Telephone Number- 1800-233-2677</td>
</tr>
</tbody>
</table>

**Section 2: Composition and Information on Ingredients**

<table>
<thead>
<tr>
<th>Composition:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aluminium Oxide</strong></td>
</tr>
<tr>
<td>Aluminium Oxide</td>
</tr>
<tr>
<td>Moisture</td>
</tr>
</tbody>
</table>

**Section 3: Hazards Identification**

Non-hazardous.

**Section 4: First Aid Measures**

**Inhalation:** If overcome by high dust concentrations, remove to a ventilated area.

**Skin contact:** Wash skin thoroughly with soap and water.

**Eye contact:** Flush eyes thoroughly with water, taking care to rinse under eye lids. If irritation persists, continue flushing for 15 minutes, rinsing from time to time under eyelids. If discomfort continues, consult a physician. Do not scrub, since the abrasion may cause irritation.

**Ingestion:** Not Applicable.
Section 5: Fire Fighting Measures

Extinguishing Media: Non-combustible
Hazardous Combustion Products: Not applicable

Section 6: Accidental Release Measures

Collect solids.
Recycle if possible.

Section 7: Handling and storage

Handling Precautions: Avoiding generating dust during handling.
Storage Conditions: Not applicable.

Section 8: Exposure controls/personal protection

Provide general and local ventilation to maintain concentrations of air contaminants below recommended standards. Wear eye and respiratory protection (goggles and mask), or a full-face respirator if necessary.

Exposure Limits:
(ACGIH = American Conference of Governmental Hygienists; TLV = Threshold Limit Value; OSHA = Occupational Safety and Health Administration (USA); PEL = Permissible Exposure Limit; TWA = Time-Weighted Average; STEL = Short Term Exposure Limit; Ceiling = Ceiling Value)

<table>
<thead>
<tr>
<th>Alumina</th>
<th>ACGIH (TLV)</th>
<th>ACGIH (TLV)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Aluminum oxide (total dust)</td>
<td>10mg/m$^3$</td>
<td>None</td>
</tr>
<tr>
<td>Respirable dust</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Section 9: Physical and chemical properties

PH: Not applicable
Boiling point: Not applicable
Melting point: 2050 C
Vapor pressure: Not applicable
Vapor density(air=1): Not applicable
Evaporation rate: Not applicable
Relative density(water =1): 3.0 – 3.7
Water solubility: Insoluble
flashpoint: Not applicable
Auto ignition temp.: Not applicable
Lower flammable limit: Not applicable
Higher flammable limit: Not applicable
Odor threshold: Not applicable
Explosive properties: Not applicable
Oxidizing properties: Not applicable
Partition coefficient (n-octanol/water): Not applicable
Section 10: Stability and Reactivity Data

Stable (yes/no): Yes
Conditions and material to avoid: Not applicable.
Hazardous decomposition products: Not applicable

Section 11: Toxicological information

Routes of exposure:
- Inhalation: Yes
- Ingestion: No
- Eye contact: No
- Skin contact: No
- Skin absorption: No

Acute Effects:
Inhalation: Inhalation of high concentrations of these inert nuisance particulates can result in mild irritation of the respiratory tract.
Skin contact: May cause irritation through mechanical abrasion.
Eye contact: May cause irritation through mechanical abrasion.
Ingestion: Not applicable.

Chronic Effects:
Medical conditions aggravated by exposure to the product: Not applicable.
Carcinogenicity / Mutagenicity / Reproductive toxicity: None of the ingredients present at concentrations equal to or greater than 0.1% are listed as carcinogen or potential carcinogen by LARC, NTP or OSHA. (LARC=International Agency for Research on Cancer; NTP=National Toxicology Program (USA); OSHA=Occupational Safety and Health Administration (USA).

Supplementary information: Activated alumina may adsorb certain gases and liquids. While alumina itself is principally inert, it may exhibit properties of the adsorbed material.

Section 12: Ecological information

Activated alumina may adsorb certain gases and liquids. While alumina itself is principally inert, it may exhibit properties of the adsorbed material.

Section 13: Disposal information

Recycle if possible. This substance is inert and does require special disposal methods. Dispose of waste in accordance with federal, state, or local regulations.

Section 14: Transport information

TDGR: Not regulated
CFR 49: Not regulated
IMO: Not regulated
ICAO: Not regulated
IATA: Not regulated
(TDGR= Transport of Dangerous Goods Regs. (Canada); CFR 49= Code of Federal Reg. (USA); IMO Internation Maritime Organization; ICAO= International Civil Aviation Organization; IATA=International Air Transport Association)
### Section 15: Regulatory information

<table>
<thead>
<tr>
<th>WHMIS CLASSIFICATION (Canada):</th>
<th>Not controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFC CLASSIFICATION (Europe):</td>
<td>Not classified</td>
</tr>
<tr>
<td>Warning symbol:</td>
<td>None</td>
</tr>
<tr>
<td>Warning word:</td>
<td>None</td>
</tr>
<tr>
<td>Risk phrases:</td>
<td>None</td>
</tr>
<tr>
<td>Safety phrases:</td>
<td>None</td>
</tr>
</tbody>
</table>

**USA REGULATIONS:**

**Section 313 Supplier Notification**

This product contains no chemical in concentrations subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (Title III of SARA) and of 40 CFR 372.

**TSCA-DSL (USA – Canada)**

This substance or all the ingredients of these products are on the Domestic Substance List (DSL – Canadian Environmental Protection Act (Canada) as well as a Chemical Substance Control Act (TSCA inventory (USA)). The presence on these lists does not require any legal reporting.

### Section 16: Other information

| National Fire Protection Agency (NDPA) codes (Health, Flammability, and Reactivity): | 0, 0, 0 |
| Hazardous Material Information Systems (HMIS) codes (Health, Flammability, and Reactivity): | 0, 0, 0 |

**Abbreviations:**

- CAS #: Chemical Abstracts Service Registry Number,
- EC= European Community
- LD50= Lethal dose 50%
- LC50= Lethal concentration 50%
- LCL0= lowest published lethal concentration.

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