

MATERIAL SAFETY DATA SHEET

Revision Date: 93-06-04 Original Date: 81-01-23



NO. 149B

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PRODUCT NAME: Activated Aluminas

Aluminum Co. of America, Industrial Chemical Div., P.O. Box 300, Bauxite, AR 72001

Emergency Phone: 412-553-4001

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATIONChemical Formula: Aluminum Oxide $Al_2O_3 \cdot xH_2O$

Product Name: Activated Aluminas

Other Designation: F-1, F-20, F-200, HF-200, S-100, S-400, CG-20, OF-2000, Active bed supports, SRU, PSD-350, RF-200, RC-400.

USA Phones: Chemtrec: 800-424-9300; Health & Safety: 412-553-4649; Product Information: 800-643-8771

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Exposure Limits</u>	<u>Typical % by Weight</u>
Aluminum oxide	1333-84-2	ACGIH TLV 10 mg/m ³ OSHA PEL 15, 5 mg/m ³ respirable	90.0-97.0
*Silicon dioxide	--	--	0.01-0.2

*Expressed as oxide equivalent

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

No unusual fire or spill hazard. Dust may be irritating to eyes and upper respiratory tract. Off-white crystalline or gelatinous granules, pellets, or powder.

Potential Health Effects**EYES:** May cause irritation due to desiccant properties.**SKIN:** None.**INHALATION:** May cause irritation of upper respiratory tract due to desiccant properties.

This product contains **silicates** at <1% by weight. Silicates include metal silicates, amorphous and crystalline silica. No analytical method exists to detect and differentiate between amorphous and crystalline silica and other silicates at <1% by weight. Based on the chemistry of bauxite-derived products, crystalline silica is not expected to be present in this product.

Alumina is a low health risk by inhalation and should be treated as a nuisance dust as specified by the American Conference of Governmental Industrial Hygienists (ACGIH).

4. FIRST AID MEASURES**EYES:** Flush eyes with plenty of water for at least 15 minutes. If irritation persists, consult a physician.**SKIN:** Wash with soap and warm water. If irritation develops, consult a physician.**INHALATION:** Remove victim to fresh air. If not breathing, give artificial respiration. Get immediate medical attention.

PRODUCT NAME: Activated Aluminas**5. FIRE FIGHTING MEASURES****FLAMMABLE PROPERTIES:** Non-flammable.

Flash Point: None.

Flammable Limits: None

AUTO-IGNITION TEMPERATURE: Not applicable.**HAZARDOUS COMBUSTION PRODUCTS:** None.**EXTINGUISHING MEDIA:** Use extinguishing agent applicable to surrounding fire.**FIREFIGHTING INSTRUCTIONS:** Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.**6. ACCIDENTAL RELEASE MEASURES****SMALL/LARGE SPILL:** Clean up using dry procedures; avoid dusting.**7. HANDLING AND STORAGE****HANDLING:** Avoid contact with eyes. Do not inhale dust.**STORAGE:** Keep material dry.**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****ENGINEERING CONTROLS:** Use with adequate ventilation to meet exposure limits listed in Section 2.**RESPIRATORY PROTECTION:** NIOSH-approved dust respirator where exposure limit is or may be exceeded.**SKIN PROTECTION:** None.**EYE PROTECTION:** Safety glasses recommended.**9. PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE:** Off-white, crystalline or gelatinous granules, pellets/powder.**BOILING POINT:** Not applicable**FREEZE-MELT POINT:** 3700°F (2038°C)**VAPOR PRESSURE (mm):** Not applicable**VAPOR DENSITY (air=1):** Not applicable**SOLUBILITY IN WATER:** Insoluble; soluble in concentrated acids and alkalis.**SPECIFIC GRAVITY:** 3.2**DENSITY:** Loose Bulk: 39-52 lb/ft³ (0.62-0.83 g/cm³).**pH:** -10 (20% slurry solution)**ODOR:** None**ODOR THRESHOLD (ppm):** Not applicable**COEFFICIENT OF WATER/OIL DISTRIBUTION:** Not applicable

PRODUCT NAME: Activated Aluminas**10. STABILITY AND REACTIVITY**

CHEMICAL STABILITY (CONDITIONS TO AVOID): Avoid water.

INCOMPATIBILITY: None.

HAZARDOUS DECOMPOSITION PRODUCTS: None.

HAZARDOUS POLYMERIZATION: None.

Generates heat with water.

Non-corrosive.

11. TOXICOLOGICAL INFORMATIONNo LD₅₀ or LC₅₀ found for oral, dermal or inhalation routes of administration.**12. ECOLOGICAL INFORMATION**

ECOTOXICOLOGICAL /CHEMICAL FATE INFORMATION:

Not available.

13. DISPOSAL CONSIDERATION

Collect in containers, bags, or covered dumpster boxes. If reuse or recycling is not possible, material may be disposed of at a sanitary landfill.

TCLP data are available.

RCRA Hazardous Waste No.: Not federally regulated.

14. TRANSPORT INFORMATION

Not regulated by U.S.A. DOT.

Canadian TDG Hazard Class & PIN - Not regulated.

15. REGULATORY INFORMATION

For inventory reporting purposes, CAS No. 1344-28-1 was assigned for aluminum hydroxide and activated alumina products instead of the CAS number indicated in Section 2.

This material does not contain nor was it manufactured using ozone-depleting chemicals.

U.S. FEDERAL REGULATIONS:

TSCA STATUS: On Toxic Substances Control Act Inventory.

CERCLA REPORTABLE QUANTITY: None.

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SARA TITLE III:

Section 302 Extremely Hazardous Substances:

None.

Section 311/312 Hazardous Categories:

Immediate (Acute).

Section 313 Toxic Chemicals:

None.

RCRA STATUS: Not regulated.

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS: Listed on Domestic Substances List.

EINECS: All components of this product are on the European Inventory of Existing Commercial Chemical Substances.

16. OTHER INFORMATION

MSDS Status: New format.

Product Use: Absorbent; dehydration agent; catalyst support.

Prepared by the Hazardous Materials Control Committee.

REFERENCES:

- American Industrial Hygiene Association (AIHA) Hygienic Guide Series, June 1978 Edition.
- U.S. Dept. of Health and Human Services, NIOSH: Registry of Toxic Effects of Chemical Substances, 1985-86 Edition.
- Sax, N. Irving: Dangerous Properties of Industrial Materials, Van Nostrand Reinhold Co., Inc., 1984.
- American Conference of Governmental Industrial Hygienists, Inc. (ACGIH), Documentation of the Threshold Limit Values and Biological Exposure Indices, Sixth Edition, 1992.

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