

MATERIAL SAFETY DATA SHEET

Vaniman Manufacturing Co.
140 N. Brandon Road
Fallbrook, CA 92028

1. CHEMICAL PRODUCT

Product: Alpha Alumina, Fused Aluminum Oxide
Trade Names: VanOxide
Synonyms: Alpha Alumina

2. COMPOSITION

Ingredient	Weight (%)	OSHA Regulated	CAS Number	OSHA PEL (mg/m ³)	TWA (mg/m ³)	Carcinogen (Y/N)
Alpha Alumina	99+%	Y	1344-28-1			
(Al ₂ O ₃) Total Dust				10	10	N
Respirable Fraction				5	5	

- Note: 1. PEL & TWA values given above are 8-hour time-weighted averages, unless otherwise specified.
2. Source of exposure limit data: ACGIH Threshold Limit Values; (OSHA Tables Z-1-A, Z-2, Z-3)
3. Materials are regulated by OSHA 29 CFR 1910.1200. Hazard Communication Standard.

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: White powder, no odor. Product does not pose significant fire or health hazards. Abrasive particulate may cause irritation to the eyes and respiratory tract. Product is non-combustible and stable.

Primary Route(s) of Entry (for particulate): **Inhalation:** Yes **Skin:** No **Ingestion:** No **Other:** No

POTENTIAL HEALTH EFFECTS:

Acute:

Eye Contact: Particulate may cause slight to moderate irritation. Abrasive action of dust can damage eyes.

Skin Contact: Not absorbed through skin; may cause abrasions.

Inhalation: Inhalation of airborne particulate may cause slight to moderate irritation of mucous membranes.

Chronic: None

Signs and Symptoms:

Irritation, shortness of breath, decreased chest expansion, dry cough, fatigue.

Medical Conditions Generally Aggravated by Exposure (to particulate):

Individuals with lung disorders should not be exposed to conditions where large airborne quantities of the nuisance dust exists without precautions taken to alleviate the aggravated pre-existing medical condition.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. Apply artificial respiration as needed. Obtain first aid or medical assistance.

Eye Contact: Immediately flush with large amounts of running water as needed. If symptoms persist, seek medical attention.

Skin Contact: If dust gets on skin, wash contaminated area with soap and water. Remove and wash contaminated clothing. If rash, irritation, or other symptoms persist, seek medical attention.

Ingestion: Leave decision to induce vomiting to a doctor, since particles may be aspirated into the lungs. Seek medical attention.

5. FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Not Applicable

Flammable Limits: Not Applicable **LEL:** Not Applicable **UEL:** Not applicable

Autoignition Temperatures: Not Applicable

General Hazard: This abrasive product is non-combustible and does not pose fire or explosion Hazards, and will not initiate or contribute to the intensity of a fire.

Extinguishing Media: As appropriate for surrounding fire.

Fire Fighting Instructions: As appropriate for surrounding fire.

Fire Fighting Equipment: As appropriate for surrounding fire.

Hazardous Combustion Product: Not applicable

6. ACCIDENTAL RELEASE MEASURE

Steps to be Taken in Case Material is Released or Spilled: Clean up using methods which avoid dust generation. If a vacuum is used, exhaust air should be filtered by a high-efficiency particulate air (HEPA) filter. Compressed air should not be used to clean up spills. During cleanup, skin and eye contact and inhalation of dust should be avoided as much as possible. **When necessary, wear appropriate personal protective equipment** (see Section 8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION MEASURES) **during clean-up operations.** Place material into a clean dry container with a clean shovel, and cover. Comply with Federal, State and Local regulations regarding reporting of spills and disposal.

7. HANDLING AND STORAGE

Storage Temperature and Pressure: Not Applicable

General: Keep product in containers. Handle in such a way to minimize from becoming dispersed in the work environment. Store in containers indefinitely with no risk of health hazard. Utilize approved dust respirator when acute dustiness has occurred in work environment. Handle with adequate ventilation for nuisance dust. See OSHA 29 CFR 1910.94 (ventilation) and 29 CFR 1910.1000 (Air Contaminants).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use local and/or general dilution ventilation, as needed, to reduce employee contaminant concentration exceed applicable OSHA PEL or ACGIH TLV (see SECTION 2.0, COMPOSITION INFORMATION ON INGREDIENTS, FOR PEL's and TWA's), or other industry standards or guidelines on exposure. If respiratory protection is required, all appropriate requirements as set forth in 29 CFR 1910.134 must be met.

Protective Gloves: As needed to prevent skin contact with abrasive dust.

Eye Protection: Safety glasses and/or dust proof safety goggles to prevent contact with abrasive dust. See OSHA 29 CFR 1910.133.

Other Protective Clothing or Equipment: Clothing which minimizes skin exposure to abrasive dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Formula:	Al ₂ O ₃
Boiling Point:	N/A
Melting Point:	2072 ° C
Freezing Point:	N/A
Vapor Pressure (mm Hg):	N/A
Vapor Density (air=1):	N/A
pH (H ₂ O):	N/A
Specific Gravity (H ₂ O=1):	3.95
Evaporation Rate:	N/A
Solubility in Water:	Insoluble
Solubility in Alcohol:	None
Appearance, Odor, and Physical State:	White powder, no odor.

10. **STABILITY AND REACTIVITY**

Stability: Product is stable under normal ambient and anticipated conditions of temperature and pressure.

Conditions to Avoid: Contact with incompatible materials.

Incompatible Materials: Not Applicable

Hazardous Decomposition: Not Applicable

Hazardous Polymerization: Not Applicable

11. **OTHER INFORMATION**

The chemical components of this product are registered under the Toxic Substances Control Act (TSCA) Title 40 CFR Part 710.

Flammability Rating:	0
Health Rating:	0
Reactivity Rating:	0
Hazard Rating:	0

Please rate consistent with NFPA Code.

12. **DISCLAIMER**

All information, recommendations, and suggestions appearing herein concerning the product are based upon data believed to be reliable. It is the user's responsibility to determine the safety, toxicity and suitability for their own use of the product described herein, and to comply with all applicable regulations. Since the actual use by others is beyond the MSDS developer's control, no guarantee, expressed or implied is made by the Vaniman Manufacturing Co. as to the effects of such use, the results to be obtained, or the safety and toxicity of the product; nor does Vaniman Manufacturing Co. assume any liability arising out of use by others of the product referred to herein. This MSDS is not intended as a license to operate under, or recommendations to infringe on, any patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.