



# Illinois Valley Minerals, L.L.C.

575 N. 18th Mile Road Tonica, IL 61370 PHONE: 815-442-8402 FAX 815-442-8402

## MATERIAL SAFETY DATA SHEET

Product/Substance Identification Fused Aluminum Oxide

Chemical Family Metal Oxides

Trade Names/Synonyms: Alundum; alumina; Dialuminum Trioxide; Aluminum Sesquioxide; Alpha-Alumina; Beta-Alumina; Gamma-Alumina; Corundum; Alumite; Almite; Martoxin; Balkalox Polishing Chemicals (Balkowski International Co.); Tabular Alumina (ALCOA); Aluminum Oxide (AL<sub>2</sub>O<sub>3</sub>); Aluminum Trioxide; Linde A,B,C (Union Carbide Corporation); D Alumina Powders (Union Carbide Corporation); 420003704; WESGO Alumina Ceramics; AL<sub>2</sub>O<sub>3</sub>; CMC00950;

Company Name: Illinois Valley Minerals, LLC  
575 N. 18th Mile Road  
Tonica, Illinois 61370

Company Emergency Telephone No: 815-442-8402  
CHEMTREC® 800-424-9300

HMIS Number 1

### Composition Ingredients Information

Hazardous Component	CAS #	OSHA PEL(1)	ACGIH TLV(2)	NIOSH
Aluminum Oxide 94 -100%	1344-28-1	15Mg/M3 (Total dust) 5Mg/M3 (resp fraction)	10 Mg/M3	(RTECS) BD1200000
Titanium Dioxide 0 - 4%	13463-67-7	15Mg/M3 (Total dust) 5Mg/M3 (resp fraction)	10 Mg/M3	(RTECS) XR2275000
Silicon Dioxide 0 - 1.3%	7631-86-9	20 mppcf (80mg/m3/%SiO <sub>2</sub> )	10 Mg/M3	(RTECS) VV731000 REL=TWA 6Mg/M3

1 Occupation Safety and Health Administration final rule permissible exposure limits.

2 American Conference of Governmental Industrial Hygienists threshold limit values.

### Physical & Chemical Characteristics

Appearance and odor: White to Gray/Brown crystals or powder, odorless.

Boiling Point:	5396F, 2980C	Melting Point:	3727-3762F, 2063-2072C
Vapor Pressures:	1 mmHg @ 2158 C	Vapor Density:	NA
PH:	NA	Specific Gravity:	(H <sub>2</sub> O = 1) 3.965 @ 25 C
Molecular weight:	101.96	Evaporation Rate:	NA
Solubility in water:	Insoluble	Volatility:	<0.5%
Solvent Solubility:	Slightly soluble; mineral acids, strong alkali Practically insoluble; nonpolar organic solvents		

**Fire and Explosion Hazard Data**

Flash Point: NA  
Flammable Limits: NA  
Extinguishing Media: Water spray, Dry Chemical, Carbon Dioxide (CO2), Foam  
Lower/Upper Explosion Limits: NA  
Special Fire Fighter Procedures: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.  
Unusual F & E Hazards: None (Material NOT combustible)

**Incompatibilities and Reactivity Data**

Stability: Stable  
Incompatibility: Halo carbons, halogens, combustible materials, oxidizing materials  
Chlorinated rubber (Hot), Chlorine Trifluoride (Violent reaction & possible ignition), Ethylene Oxide (may initiate explosive polymerization), Halocarbons (Exothermic reaction above 200 C), Halocarbons + Metals (Exothermic reaction at ambient temperatures), Oxygen Difluoride (Exothermic reaction), Sodium Nitrate (may form explosive mixture), Vinyl acetate (Possible vigorous reactions).

**Hazardous Decomposition or By-Products:**

Thermal decomposition products: miscellaneous decomposition products  
Generating dust

**Potential Health Hazard Data**

Route(s) of entry: Inhalation: Yes, may cause coughing  
Ingestion: None known, not recommended  
Skin: Not absorbed through skin  
Eye: Yes, may cause irritation

**First Aid measures**

Inhalation: Move to fresh air. If difficulty-breathing may administer oxygen.  
Seek medical attention if needed.  
Ingestion: Seek medical attention if needed.  
Skin contact: Wash exposed areas with soap and water. If irritation persists, seek medical attention.  
Eye contact: Flush with water. If irritation persists, seek medical attention.

**Precautions for Safe Handling and Use**

Steps to be taken in case material is released or spilled: Sweep, shovel or vacuum materials.  
Limit exposure to dust.  
Waste Disposal method: Comply with all state, federal and local regulations.  
Precautions to be taken in handling and storing: Limit generation of dust.  
Keep separate from incompatible substances.

**Control Measures**

Respiratory Protection: As needed. NIOSH approved dust respirator recommended for limiting exposure.  
Similar respiratory protection required at concentrations above PEL.  
Ventilation: Adequate local exhaust.  
Protective Gloves: As needed  
Eye Protection: Safety goggles as needed

**Sara Title III Reporting**

To the best of our knowledge, this product does not contain any substance requiring on the SARA, Title III, Section 313 list.

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The information published in this Material Safety Data Sheet has been compiled from our experience, and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the user's application and for adopting necessary safety precautions.