



# Safety Data Sheet

## Aluminum Oxide

### Section 1 Product Description

Product Name: Aluminum Oxide  
Recommended Use: Sandblasting, wear-resistant coating, non-slip flooring  
Uses Advised Against: None Identified  
Distributor: Global Abrasive Products, Inc.  
19100 Industrial Dr., Vulcan, MI 49892  
1-800-985-2252  
Chemical Information: 1-800-985-2252 (8 am - 5 pm (CST) M-F)  
E-Mail: sales@global-abrasive.com

### Section 2 Hazard Identification

Classification of the substance or Mixture

GHS Classification: Not classified as dangerous  
US OSH Certification: Not classified as dangerous

Other safety Precautions: Prolonged exposure to elevated noise levels during operations may affect hearing. The dust generated from abrasive blasting has a potential hazard because of the materials being blasted (ie paint, coatings, rust, etc).

### Section 3 Composition/Information on Ingredients

CHEMICAL NAME	CAS NUMBER	AMOUNT	EU/GHS CLASSIFICATIONS
Aluminum Oxide	1344-28-1	90-100%	Not dangerous or hazardous

### Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
Eyes: In case of contact with eyes, rinse immediately with water and seek medical advice.  
Skin Contact: After contact with skin, wash with plenty of water  
Ingestion: If swallowed do not induce vomiting: seek medical advice and show this sheet or label on container.

### Section 5 Firefighting Procedures

Extinguishing Media: Use any media that is suitable for surrounding fire.  
Special Hazards: This product is not flammable or combustible, however, there is potential risk from the base material being processed. Many materials create

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flammable/explosive dusts or turnings when machined or ground.  
 Advice to Fire-Fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fire involving chemicals.

Section 6	Accidental Release Measures
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Personal precautions	Keep unnecessary personnel away. Keep upwind. Ventilate the area. Avoid inhalation of dust from the spilled material. Wear appropriate respirator and protective clothing as need to avoid eye contact and inhalation of dust.
Methods for clean up	Sweep up or vacuum up spillage. Clean up in accordance with all applicable regulations.

Section 7	Handling and Storage
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Handling	Keep formation of airborne dusts to a minimum. Avoid breathing dust and avoid contact with eyes. Use only with adequate ventilation.
Storage	No special storage required. Keep container closed.

Section 8	Exposure Controls/Personal Protection
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Chemical Name	Type	Value	Form
Aluminum Oxide (1344-28-1)	TWA	1.000 mg/m3	Respirable fraction
Occupational exposure limits U.S. - OSHA	Type	Value	Form
Material Aluminum Oxide (1344-28-1)	PEL	15.0000 mg/m3 5.0000 mg/m3	total dust repirable fraction

Engineering control	Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.
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Personal protective equipment	Use tight fitting goggles if dust is generated. Wear appropriate clothing to prevent repeated or prolonged skin contact. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable), an approved respirator must be worn. Respirator type: High efficiency particulate respirator.
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Section 9	Physical and Chemical Properties
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Appearance: Powder	Flammability limits (gas/solid): N/A
Odor threshold: N/A	Specific gravity: 4
Physical state: solid	Relative density: N/A

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Form: Powder  
pH: N/A  
Flash point: N/A  
Boiling Point: 3977 °C (5390.6 °F)

Auto-ignition temperature: N/A  
Decomposition temperature: N/A  
Molecular formula: Al<sub>2</sub>O<sub>3</sub>  
Melting Point: 2050 °C (3722 °F)

### Section 10 Chemical Stability & Reactivity

Reactivity: Not reactive under normal conditions of use and storage  
Chemical Stability: Stable  
Conditions to Avoid: None known  
Incompatible Materials: None known  
Hazardous decomposition products: None known  
Possibility of hazardous reactions: Hazardous polymerization does not occur.

### Section 11 Toxicological Information

Inhalation: Breathing dust may cause irritation to nose, throat and upper respiratory tract.  
Skin Contact: May cause abrasive skin irritation  
Eye Contact: May cause abrasive irritation  
Ingestion: Not toxic. Swallowing may cause gastrointestinal disturbances.  
Chronic Health Effects: Prolonged inhalation of respirable dust may cause adverse lung effect.  
Specific Organ Toxicity: With Repeated Exposure-recent studies of alumina refinery employees indicate that current exposures to aluminum compounds are not associated with adverse respiratory effects.  
Skin Irritation: Aluminum oxide was not a skin irritant in animal studies. Skin contact may result in abrasive injury.  
Respiratory Irritation: No chemical irritation expected.  
Sensitization: Not expected to be a skin or respiratory sensitized based on human experience.  
Germ Cell Mutagenicity: None of the components have been shown to cause mutagenic activity  
Carcinogenicity: Aluminum oxide is not listed as a carcinogen or potential carcinogen by ACGIH, IARC, NTP, OSHA or the EU CLP.  
Reproductive effects: No specific data; however, this product is not expected to present a risk of adverse reproductive or developmental toxicity.

### Section 12 Ecological Information

Toxicity: Aluminum: NOEC 96 hr Salmo trutta >100 mg/L; NOEC 48 hr daphnia magna >100 mg/L; NOEC 72 hr Selenastrum capricornutum >100 mg/L  
Degradability: Biodegradation is not applicable to inorganic substances  
Bioaccumulative Potential: No data available  
Mobility in Soil: No data available  
Other Adverse Effects: None known

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### Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all Federal, State and Local regulations. Local regulations may be more stringent than regional and national requirements. Contact a permitted waste disposer (TSD) to assure compliance.

### Section 14 Transport Information

DOT: Not regulated as dangerous goods.  
IATA: Not regulated as dangerous goods.  
IMDG: Not regulated as dangerous goods.

### Section 15 Regulatory Information

US Federal Regulations: This material contains one or more of the following chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA 940 CFR 302.4), TSCA 12 (b), and/or required an OSHA process safety plan.  
Aluminum oxide (1344-28-1)  
SARA 313: 1.0% de minimis concentration (fibrous forms)

SARA 311.322

Hazard Categories

Acute Health - No  
Chronic Health - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

Section 311 hazardous chemical - Yes

Aluminum Oxide appears on these states hazardous substances list:

CA, MA, MN, NJ, & PA

Not regulated under California Proposition 65

Canada: WHMIS CLASSIFICATION: D2B

### Section 16 Other Information

NFPA RATING (NFPA 704)	FIRE: 0	HEALTH: 1	INSTABILITY: 0
HMIS RATING	FIRE: 0	HEALTH: 1	PHYSICAL HAZARD: 0

EU and GHS Classes and Risk Phrases and Hazard Statements for Reference (See Section 2 & 3)  
None

SDS Revision History: All Sections revised.

SDS Date of Preparation: 03/02/2015

Date of Last Revision: 03/02/2015

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Global Abrasive Products, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.