

SAFETY DATA SHEET

For

Aluminum Oxide White

1. Identification

Product identifier Aluminum Oxide White

Other means of identification

SDS number None

Included Products Aluminum Oxide White

Synonyms Aluminum Oxide

Recommended use For abrasive blasting on dental lab prosthetic devices (extra-oral use only)

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name Gresco Products, Inc.
Address 13391 Murphy Road
Stafford, TX 77477

Telephone 281-261-1811
Website www.grescoproducts.com
Emergency phone number None

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Aluminum Oxide	1344-28-1	> 99

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact	Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Do not induce vomiting. Rinse mouth with water. Seek medical attention if large amount is Swallowed, or if you feel unwell.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminum Oxide	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminum Oxide	TWA	5 mg/m ³	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Aluminum Oxide	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Wear approved safety goggles.		
Skin protection			
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.		
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.		
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.		
Thermal hazards	None.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.		

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Powder.
Color	White to off-white.
Odor	Low to no odor.
Odor threshold	Not applicable.
pH	No known
Melting point	2050 C Not applicable.
Initial boiling point	2977 C

Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.

Vapor density	Not applicable.
Relative density	4 (H ₂ O=1)
Solubility(ies)	
Solubility (water)	Not soluble

Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	55 - 70 lb/ft ³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Dust generation.

Incompatible materials Acids, bases, oxidizing agents, interhalogens, halocarbons.

Hazardous decomposition products Metal oxide fumes.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Ingestion may cause irritation and stomach discomfort.
Inhalation	Airborne dust may irritate throat and upper respiratory system causing coughing.
Skin contact	May cause skin irritation.
Eye contact	Direct contact with airborne particulates may cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity	Aluminum Oxide: Oral rat LD50 >10000 mg/kg; LC50 Inhalation rat >2.3 mg/L/4 hr
Skin corrosion/irritation	Skin contact may result in abrasive injury.
Serious eye damage/eye irritation	Eye contact may result in abrasive injury and irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not expected to cause respiratory sensitization based on non-skin sensitization history.
Skin sensitization	Not a skin sensitizer.

Germ cell mutagenicity Has not been shown to cause mutagenic activity.

Carcinogenicity This material is not classified as a carcinogen by IARC, ACGIH, NTP or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure No data available, but none expected.

Specific target organ toxicity - repeated exposure No data available, but none expected.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Chronic effects Recent studies of alumina refinery employees indicate that current exposures to aluminum compounds are not associated with significant adverse respiratory effects. The small changes in pulmonary functions parameters and respiratory symptoms observed were likely due to exposure to irritants and were not considered clinically significant.

12. Ecological information

Toxicity Aluminum oxide: NOEC 96 hr Salmo trutta >100 mg/L; NOEC 48 hr daphnia magna >100 mg/L; NOEC 72 hr Selenastrum capricornutum >100 mg/L.

Persistence and degradability Biodegradation is not applicable to inorganic substances.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

US Federal regulations

TSCA Chemical Inventory Status: All components of this product are listed.

CERCLA Reportable Quantity: None.

SARA Title III:

Section 302 Extremely Hazardous Substances: None.

Section 304 Emergency Release Reporting: None.

Section 311/312 Hazardous Categories: Immediate (acute).

Section 313 Toxic Categories: None.

Clean Air Act of 1990 – Title VI: This material does not contain, nor was it manufactured using ozone depleting chemicals.

US State regulations

California Proposition 65: Not listed.

Cal-OSHA Workplace Airborne Contaminant: Listed.

Idaho Air Contaminant: Listed.

Illinois Toxic Substances Disclosure to Employees List: Listed.

Massachusetts Right to Know List: Listed.

Massachusetts Hazardous Substance Code: F9

Minnesota Hazardous Substance List: Listed. Code: A Carcinogen: No

New Jersey Right to Know List: Listed – substance No. 2891

Pennsylvania Right to Know List: Listed.

Pennsylvania Hazardous Substance List (Chapter 323 Appendix A): Listed Code: E

Rhode Island Hazardous Substance List: Listed.

Texas Air Contaminant with Health Effects Screening Level: Listed (as a synonym)

Washington Air Contaminant: Listed – limit TWA 10 mg/m³

Canadian Regulations:

WHMIS Classification: Not a controlled product.

DSL (Domestic Substance List): All components of this product are listed on the DSL.

NPRI (National Pollutant Release Inventory): Not subject to mandatory reporting requirements.

IDL (Ingredient Disclosure List): All components of this product are listed on the IDL.

Canadian Hazard Symbol: N/AEU Regulations (EINECS 215-691-6)

Indication of Danger: Not dangerous.

Risk Phrases: R36/37/38: Irritating to eyes, respiratory system, and skin.

Safety Phrases: S24/25/: Avoid contact with skin and eyes.

S22: Do not breathe dust.

This product is considered non-dangerous in accordance with 1999/45/EC.

Chemical Safety Assessment: No

16. Other information, including date of preparation or last revision

Issue date May 9, 2016

Revision date May 9, 2016

Version # 01

Further information None

NFPA ratings

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe



Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.