

SAFETY DATA SHEET

1. IDENTIFICATION

Product: Aluminum Oxide | Alumina, Fused Aluminum Oxide, White Corundum
Supplier: Torginol, Inc.
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 Sheboygan, WI 53081
 USA
Phone: (920) 694-4800
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Website: www.torginol.com
Emergency: (920) 694-4800 or consult a physician

2. HAZARDS IDENTIFICATION

This product is considered non-hazardous under the OSHA Hazard Communication Standard (29CFR1910.120).

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS Number</u>	<u>Composition</u>
Aluminum Oxide	1344-28-1	95 – 100 %
Titanium Dioxide	13463-67-7	< 1%

4. FIRST-AID MEASURES

Inhalation

Remove victim to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation or other symptoms persist.

Skin contact

Remove contaminated clothing. Wash with soap and water. If irritation develops, get medical attention.

Eye contact

Remove contact lenses if present and easy to do. Flush eyes thoroughly with large amounts of water, holding eyelids open. If irritation persists, seek medical attention.

Ingestion

Rinse mouth with water. Do not induce vomiting unless directed to do so by a medical professional. Never give anything by mouth to an unconscious or convulsing person. Get medical attention if symptoms develop.

Most important symptoms/effects, acute and delayed:

Dust may cause eye and respiratory irritation.

Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs.

Indication of immediate medical attention and special treatment, if necessary:

None required under normal conditions of use.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use media appropriate for the surrounding fire.

Specific hazards arising from the chemical: None known.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8. Avoid breathing dust.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Scoop or sweep up and place into a container for disposal. Avoid generating dust.

7. HANDLING AND STORAGE

Handling

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling. Use with adequate ventilation.

Storage

No special storage required

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Aluminum Oxide 5 mg/m³ TWA (respirable)
 15 mg/m³ TWA (total dust) OSHA PEL None Established ACGIH TLV

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Personal Protective Equipment

Respiratory protection: If the exposures are excessive, a NIOSH approved respirator with a dust/mist filter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin protection: Wear rubber gloves to avoid skin contact.

Eye protection: Chemical safety goggles recommended to avoid eye contact. .

Other: Impervious clothing as needed to prevent contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance:	White Powder	Specific Gravity:	3.4 – 4.0
Odor:	Odorless	Melting Point:	2070°C
Boiling Point:	N/A	Flash Point:	N/A
Vapor Density:	Not Volatile	Solubility in Water:	Insoluble
Coating V.O.C.:	Not Volatile	Material V.O.C.:	Not Volatile

10. STABILITY AND REACTIVITY

Reactivity:	None known.
Chemical Stability:	Stable.
Conditions to Avoid:	None known.
Incompatible Materials:	None known.
Hazardous Byproducts:	None known.

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11. TOXICOLOGICAL INFORMATION

Inhalation

Excessive inhalation of dust may cause upper respiratory tract irritation, coughing and difficulty in breathing.

Ingestion

Swallowing may cause gastrointestinal irritation, nausea and diarrhea.

Skin Contact:

May cause mechanical skin irritation with redness and pain.

Eye Contact:

May cause mechanical irritation with redness and tearing.

Chronic Effects from Short- and Long-Term Exposure:

Prolonged inhalation of respirable dust may cause adverse lung effects.

Reproductive Toxicity

This product is not expected to cause adverse reproductive or developmental effects.

Sensitization

This product has not been shown to cause sensitization in animals or humans.

Mutagenicity

This product is not expected to cause mutagenic activity.

Carcinogenicity

None of the components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values

Aluminum Oxide: Oral rat LD50 >10000 mg/kg; LC50 Inhalation rat >2.3 mg/L/4 hr

12. ECOLOGICAL INFORMATION

Ecotoxicity

<i>Aluminum Oxide</i>	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: No data available

Mobility in soil: No data available

Other adverse effects: None known

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

Not Regulated: Ship as Class 50

15. REGULATORY INFORMATION

U.S. Toxic Substances Control Act: Compliant with regulations

Sara Title III – Sections 312 & 313: Not hazardous

California Proposition 65: No ingredients in this product are known to cause cancer, birth defects or reproductive hazards.

Canadian Domestic Substances List: All ingredients in this product are listed or exempt from listing.



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16. OTHER INFORMATION

NFPA Rating: Health = 1

Flammability = 0

Instability = 0

HMIS Rating: Health = 1

Flammability = 0

Physical Hazard = 0

Disclaimer

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N/A = Not Applicable

N/D = Not Determined

N/E = Not Established