

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Alumina Polish
Part Number: ALUM (all sizes / microns)
Relevant Use: Polishing Liquid
Manufacturer: Sturbridge Metallurgical Services Inc.
City, State, Zip: Sturbridge MA 01566
Phone Number: 508-347-5288
Emergency Phone: **CHEMTREC 1-800-424-9300**

Section 2: Hazard(s) Identification

Hazardous classification of the substance or mixture:

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Pictogram: Not applicable

Signal word: Not applicable

Hazards not otherwise classified: None

Section 3: Composition/Information on Ingredients

Chemical Name	CAS No.	% Concentration
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	10-20
Water	7732-18-5	75-90

Section 4: First-Aid Measures

First-aid measures after inhalation

Remove person to fresh air. If you feel unwell, get medical attention

First-aid measures after skin contact

Wash with soap and water. If signs/symptoms develop, get medical attention.

First-aid measures after eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

First-aid measures after ingestion

Rinse mouth. If you feel unwell, get medical attention

Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

Indication of any immediate medical attention and special treatment required

Not applicable

Section 5: Fire-Fighting Measures

Suitable extinguishing media

Non-combustible. Use a fire fighting agent suitable for surrounding fire.

Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated

Section 6: Accidental Release Measures**Personal Precautions, Protective Equipment and Emergency Procedures**

Ventilate the area with fresh air. Observe precautions from other sections

Environmental precautions

Avoid release to the environment.

Methods and materials for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

Section 7: Handling and Storage**Precautions for safe handling**

For industrial or professional use only. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidizing agents.

Section 8: Exposure Controls/Personal Protection Exposure Limits**Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Component	CAS No.	Agency	Limit Type	Additional Comments
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	CMRG	TWA:1 fiber/cc	
Aluminum Oxide Mineral (non-fibrous)	1344-28-1	OSHA	TWA (as total dust):15 mg/m ³ ; TWA (respirable fraction):5 mg/m ³	
Aluminum, insoluble	1344-28-1	ACGIH	TWA (respirable fraction):1 mg/m ³	A4: Not class.as

compounds				human carcinogen
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Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

Eye/Face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety Glasses with side shields

Skin/hand protection

No protective gloves required. Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

Section 9: Physical and Chemical Properties

Physical state: Liquid

Appearance: White liquid with suspended solids

Color: White

Odor: Odorless

Odor Threshold: No data available

pH: 9

Melting Point: $\geq 32^{\circ}\text{F}$

Boiling Point: $\geq 212^{\circ}\text{F}$

Flash Point: No flash point

Relative evaporation rate: No data available

Flammability (solid, gas): Not applicable

Explosion limits: Not applicable

Vapor pressure: No data available

Vapor density: No data available

Relative density: 1.1 – 1.2

Water Solubility: Complete

Auto-ignition temperature: Not applicable

Viscosity: No data available

Volatile Organic Compounds: 0 g/l

Percent volatile: 0%

VOC less H₂O & Exempt Solvents: 0 g/l

Section 10: Stability and Reactivity

Reactivity: This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: None known

Incompatibilities: Strong oxidizing agents Strong acids

Hazardous Decomposition Products: None Known

Section 11: Toxicological Information:

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

Signs and Symptoms of Exposure

Inhalation: Dust from grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin corrosion/irritation: Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

Eye Contact: Dust created by grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion: Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available. Calculated ATE>5000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Dermal		LD50 estimated to be > 5000 mg/kg
Aluminum Oxide Mineral (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 >2.3 mg/1
Aluminum Oxide Mineral (non-fibrous)	Ingestion	Rat	LD50 >5000 mg/kg

ATE=acute toxicity estimate

Skin Corrosion / Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation

Serious Eye Damage / Irritation

Name	Species	Value
Aluminum Oxide Mineral (non-fibrous)	Rabbit	No significant irritation

Skin Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Aluminum Oxide Mineral (non-fibrous)	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
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Aluminum Oxide Mineral (non-fibrous)	Inhalation	Rat	Non carcinogenic
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Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide Mineral (non-fibrous)	Inhalation	Pneumoconiosis Pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL N/A	Occupational exposure

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Section 12: Ecological Information

Toxicity-No data available

Ecology – water: Harmful to aquatic life.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

Section 13: Disposal Considerations

Dispose in a safe manner in accordance with all local/national regulations. Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations.

Avoid release to the environment.

Section 14: Transportation Information**Department of Transportation (DOT, United States of America)**

Non-hazardous substance

Section 15: Regulatory Information

The components of this product are in compliance with the chemical notification requirements of TSCA.

Section 16: Other Information

Disclaimer: The information above is believed to be accurate and represents the best information currently available to us. SMS, Inc. makes no warranty, express or implied, as to its accuracy, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. We shall not be liable for any damages to person or property resulting from its use.