



## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Alumina Slurry: Alpha, Gamma, Aluminum Oxide

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Polishing liquid

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Abrasive Systems Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

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

#### 2.2. Label elements

##### Signal word

Not applicable.

##### Symbols

Not applicable.

##### Pictograms

Not applicable.

#### 2.3. Hazards not otherwise classified

None.

### SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|------------|------------|---------|
|------------|------------|---------|

|                                      |           |         |
|--------------------------------------|-----------|---------|
| Aluminum Oxide Mineral (non-fibrous) | 1344-28-1 | 10 - 20 |
| Water                                | 7732-18-5 | 75 - 90 |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

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

#### Skin Contact:

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

#### Eye Contact:

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

#### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

#### Substance

Carbon monoxide  
Carbon dioxide

#### Condition

During Combustion  
During Combustion

### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material 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

### 7.1. 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.)

### 7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidizing agents.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 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.

| Ingredient                           | C.A.S. 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/m3;TWA(respirable fraction):5 mg/m3 |                                |
| Aluminum, insoluble compounds        | 1344-28-1  | ACGIH  | TWA(respirable fraction):1 mg/m3                             | A4: Not class. as human carcin |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

#### 8.2.1. 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.

#### 8.2.2. Personal protective equipment (PPE)

##### 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

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                                |                                               |
|------------------------------------------------|-----------------------------------------------|
| <b>General Physical Form:</b>                  | Liquid                                        |
| <b>Odor, Color, Grade:</b>                     | Odorless / White liquid with suspended solids |
| <b>Odor threshold</b>                          | <i>No Data Available</i>                      |
| <b>pH</b>                                      | 9                                             |
| <b>Melting point</b>                           | $\geq 32$ °F                                  |
| <b>Boiling Point</b>                           | $\geq 212$ °F                                 |
| <b>Flash Point</b>                             | No flash point                                |
| <b>Evaporation rate</b>                        | <i>No Data Available</i>                      |
| <b>Flammability (solid, gas)</b>               | Not Applicable                                |
| <b>Flammable Limits(LEL)</b>                   | <i>Not Applicable</i>                         |
| <b>Flammable Limits(UEL)</b>                   | <i>Not Applicable</i>                         |
| <b>Vapor Pressure</b>                          | <i>No Data Available</i>                      |
| <b>Vapor Density</b>                           | <i>No Data Available</i>                      |
| <b>Specific Gravity</b>                        | 1.1 - 1.2                                     |
| <b>Solubility in Water</b>                     | Complete                                      |
| <b>Partition coefficient: n-octanol/ water</b> | <i>No Data Available</i>                      |
| <b>Autoignition temperature</b>                | <i>Not Applicable</i>                         |
| <b>Viscosity</b>                               | <i>No Data Available</i>                      |
| <b>Volatile Organic Compounds</b>              | 0 g/l                                         |
| <b>Percent volatile</b>                        | 0 %                                           |
| <b>VOC Less H2O &amp; Exempt Solvents</b>      | 0 g/l                                         |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong oxidizing agents

Strong acids

### 10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## 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.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### 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 Contact:

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 > 5,000 mg/kg |
| Aluminum Oxide Mineral (non-fibrous) | Dermal                         |         | LD50 estimated to be > 5,000 mg/kg              |
| Aluminum Oxide Mineral (non-fibrous) | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 2.3 mg/l                                 |
| Aluminum Oxide Mineral (non-fibrous) | Ingestion                      | Rat     | LD50 > 5,000 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            |
|--------------------------------------|------------|---------|------------------|
| Aluminum Oxide Mineral (non-fibrous) | Inhalation | Rat     | Not carcinogenic |

#### Reproductive Toxicity

##### Reproductive and/or Developmental Effects

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

#### Target Organ(s)

##### 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 Not available | occupational exposure |

#### Aspiration Hazard

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

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

## SECTION 12: Ecological information

#### Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

#### Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty and clean product containers may be disposed as non-hazardous waste. Consult your specific regulations and service providers to determine available options and

requirements.

**EPA Hazardous Waste Number (RCRA):** Not regulated

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No   Pressure Hazard - No   Reactivity Hazard - No   Immediate Hazard - No   Delayed Hazard - No

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

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

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 0 **Flammability:** 0 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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