



## Safety Data Sheet Dense Alumina Ceramic

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### SECTION 1: Identification

#### Product identifier

Product name	Dense Alumina Ceramic
Substance name	Aluminum Oxide Al <sub>2</sub> O <sub>3</sub>
Other names / synonyms	Alumina Ceramic; AL 74, AL 85, AL 94, AL 95, AL 96, AL 96P, AL 98, AL 98P, AL 995, AL 998, AL 9980, AL999

#### Recommended use of the chemical and restrictions on use

Technical Ceramic Components

#### Supplier's details

Name	Superior Technical Ceramics
Address	600 Industrial Park Road St. Albans, Vermont 05478 USA
Telephone	802-527-7726
Fax	802-527-1181

#### Emergency phone number(s)

802-527-7726

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### SECTION 2: Hazard identification

This product is considered an article and does not pose any health hazard under normal use. The health effects listed below may be relevant when dust is generated during machining or other processing conditions.

#### Classification of the substance or mixture

Not a hazardous substance or mixture.

#### GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

Not a hazardous substance or mixture.

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### SECTION 3: Composition/information on ingredients

#### Components

##### 1. Aluminum oxide

Concentration	> 70 - 100 % (Weight)
CAS no.	1344-28-1

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### 2. Glassy Phase

Concentration 0 - 30 % (Weight)

Other names / synonyms Glassy Phase  
CAS no. 60676-86-0

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## SECTION 4: First-aid measures

### Description of necessary first-aid measures

General advice	Hazard is principally that of a nuisance dust only as a byproduct of machining. Coughing or shortness of breath may occur in cases of excessive inhalation.
If inhaled	Move to fresh air and consult with local medical personnel if discomfort persists.
In case of skin contact	Wash affected area with soap and water and consult with local medical personnel if irritation persists.
In case of eye contact	Flush with tepid water for a minimum of 15 minutes and consult with local medical personnel if discomfort persists.
If swallowed	Administer water to dilute, but not if person is unconscious. Consult with local medical personnel if discomfort persists.

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## SECTION 5: Fire-fighting measures

### Suitable extinguishing media

Use any means suitable for extinguishing surrounding fire.

### Special protective actions for fire-fighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

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## SECTION 6: Accidental release measures

### Methods and materials for containment and cleaning up

Any dust from machining should be wet mopped or dry vacuumed.

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## SECTION 7: Handling and storage

### Precautions for safe handling

Any dust from machining should be wet mopped or dry vacuumed.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### 1. alpha-Alumina (CAS: 1344-28-1)

PEL (Inhalation): see PNOR (Cal/OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

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### 2. alpha-Alumina (CAS: 1344-28-1)

REL (Inhalation): See Appendix D (NIOSH)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### 3. alpha-Alumina, Total dust (CAS: 1344-28-1)

PEL (Inhalation): 15 mg/m<sup>3</sup> (OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### 4. alpha-Alumina, Total dust (CAS: 1344-28-1)

PEL (Inhalation): 10 mg/m<sup>3</sup> (Cal/OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### 5. alpha-Alumina, Respirable fraction (CAS: 1344-28-1)

PEL (Inhalation): 5 mg/m<sup>3</sup> (OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### 6. alpha-Alumina, Respirable fraction (CAS: 1344-28-1)

PEL (Inhalation): 5 mg/m<sup>3</sup> (Cal/OSHA)

OSHA Annotated Table Z-1, [www.osha.gov](http://www.osha.gov)

### Appropriate engineering controls

Local or general exhaust ventilation recommended while machining.

### Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Safety goggles in the presence of airborne dust.

#### Skin protection

Polymer gloves for prolonged dust exposure.

#### Respiratory protection

NIOSH/MSHA approved respirator for dust when exposure limit is exceeded.

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## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance/form	White, Cream or Purple Solid
Odor	Odorless
Odor threshold	N/A
pH	N/A
Melting point	>1643°C (2990°F)
Initial boiling point and boiling range	N/A
Flash point	N/A
Evaporation rate	N/A
Flammability (solid, gas)	N/A
Upper/lower flammability limits	N/A
Upper/lower explosive limits	N/A
Vapor pressure	N/A
Vapor density	N/A
Relative density	>3.0g/cc
Solubility(ies)	Insoluble in water
Partition coefficient: n-octanol/water	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A
Viscosity	N/A

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Explosive properties  
Oxidizing properties

N/A  
N/A

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### SECTION 10: Stability and reactivity

#### Chemical stability

Stable

#### Conditions to avoid

Certain extreme acidic conditions (consult manufacturer for cautionary advice).

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### SECTION 11: Toxicological information

No Applicable Information Found

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### SECTION 12: Ecological information

No Applicable Information Found

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### SECTION 13: Disposal considerations

#### Disposal of the product

This material is not hazardous per 40 CFR 261. Consultation with federal, state and local officials is recommended before disposal.

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### SECTION 14: Transport information

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

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### SECTION 15: Regulatory information

#### US FEDERAL

##### TSCA

CAS# 1344-28-1 is listed on the TSCA inventory.

CAS# 60676-86-0 is listed on the TSCA inventory.

##### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

##### Section 313

CAS# 1344-28-1 is reported under Section 313.

##### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### US STATE

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**CAS# 1344-28-1** can be found on the following state right to know lists:

Illinois, Minnesota, Massachusetts, New Jersey, Pennsylvania, Texas. Consult your state and local resources for further information.

**California Prop 65**

Substance Not Listed

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### SECTION 16: Other information

#### Further information/disclaimer

Although reasonable care has been taken to provide accurate and current information in preparation of this document, Superior Technical Ceramics extends no warranties, makes no representation and assumes no responsibility for any loss, damage, or injury of any kind which may result from reliance of information provided in this document by any person.

#### Preparation Information

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