



## SAFETY DATA SHEET

### Section 1: Identification

**Product Identifier:** AS-7M

**Other means of identification:** Alumina Textile

**Recommended use:** Thermal and electrical insulation. Composite reinforcement. Used primarily at high temperatures.

**Manufacturer:**

ZIRCAR Ceramics, Inc.  
P.O. Box 519  
Florida, NY 10921  
[www.zircarceramics.com](http://www.zircarceramics.com)  
[sales@zircarceramics.com](mailto:sales@zircarceramics.com)  
(845) 651-6600

**Emergency Telephone Number:**

CHEMTREC: (800) 424-9300 (USA/Canada), (703) 527-3887 (International)

### Section 2: Hazards Identification

**Hazard Classification(s):** Skin Irritation, Eye Effects, category 2 Respiratory Sensitizer.

**Signal Word:** Warning.



**Precautionary Statement(s):** May cause skin, eye and respiratory irritation.

**CAUTION:** Handling or machining of these products may produce respirable dust particles. Dust may irritate eyes, skin and respiratory tract.

**Inhalation:** As AS-7M fibers are 7 micron in diameter and continuous in length and are therefore not considered to be respirable. However, when mechanically shortened, these fibers may be inhaled and may cause irritation or soreness of throat and nose.

**Eye Contact:** Product in eyes will cause temporary severe irritation or inflammation.

**Skin Contact:** May cause temporary dryness, irritation or rash.

**Ingestion:** Ingestion is unlikely. May cause gastrointestinal disturbances. Never induce vomiting without the advice of a physician.

**Medical Conditions Aggravated by Exposure:** Respiratory effects may be aggravated by smoking. Pre-existing respiratory problems may be aggravated by dust.

### Section 3: Composition / Information on Ingredients

#### Chemical and common names, CAS numbers and concentration

Chemical Name	Common Name	CAS Number	% by weight
Aluminatesilicate	Aluminosilicate	1327-36-2	97-99.5
Organic Sizing			0.5 – 3.0

### Section 4: First Aid Measures

**Inhalation:** Remove to fresh air. Rinse mouth to clear throat and expel liquid. Blow nose to evacuate dust. Consult a physician if irritation persists.

**Eye Contact:** Products can be severe physical irritants to eyes. Do not rub eyes. Keep hands or contaminated body parts away from eyes. Remove contact lenses. Flush with water. If irritation persists, consult a physician.

**Skin Contact:** Products are irritants. Wash with soap and water. For dryness, a skin cream may be helpful. Do not apply anything to a rash. Consult a physician if irritation persists.

**Ingestion:** Drink plenty of water. Do not induce vomiting without advice of a physician. Seek medical attention.

Note to Physicians: Aluminatesilicate fibers and dusts have caused no systemic or pathological problems. The material is inert in the body. Some individuals may experience allergic sensitivity reactions. These are generally limited to mild occupational dermatitis. Chronic inhalation may result in pleural plaques not associated with cancers. Other effects principally derived from physical abrasion. Dusts are therefore considered of the inert (nuisance) type and would not be expected to cause permanent damage to tissues on inhalation unless the exposure is severe. Chronic exposure may produce radioplaque deposits in the pulmonary system with little or no parenchymal reactions. Some individuals may exhibit allergenic reactions ranging from asthmatic symptoms to benign pneumoconiosis.

## Section 5: Fire Fighting Measures

**Materials are not combustible.** Use extinguishing media suitable for type of surrounding fire.

## Section 6: Accidental Release Measures

**Spill Procedures:** Clean up procedures should minimize formation of airborne dusts. Remove dust by vacuuming using HEPA filtration where possible.

**Release into Air:** Prevent release of airborne particulates where possible. Do not blow dust around. Not a regulated hazardous substance. See Section 8 for appropriate engineering controls.

**Release into Water:** Release into water is not appropriate. Not a regulated hazardous substance.

## Section 7: Handling and Storage

**Storage:** These materials are stable and may be stored in a dry place indefinitely. Physical abrasion may produce small amounts of respirable dusts. See precautions/exposure limits under Section 8.

**Normal Use:** Materials are stable under normal use and are not expected to produce significant hazardous by-products or emissions. Small amounts ( below exposure limits) of smoke will be generated upon initial heating of product as organic sizing decomposes.

**Machining and Cutting:** These materials may produce respirable particles and nuisance dusts when machined or cut. See Section 8 for exposure controls and personal protection during machining or installation procedures.

**High Temperature Conditions:** Service significantly above the product design temperature may increase friability and the possibility of generating airborne fibers or particulates. While not considered problematic during use, airborne fibers and particulates may complicate removal activities. It is recommended that product use be carefully matched to design parameters.

**After Service:** Appropriate ventilation and respiratory protection should be provided in compliance with OSHA standards. Strict adherence to recommended safe work practices is advised. Product removal must consider possible pickup of contaminants found where used and the possibility of usage above design temperatures. See Section 8 for appropriate respiratory protection during removal of material the subject of this SDS.

Section 8: Exposure Controls / Personal Protection

**Exposure Limits**

Aluminatesilicate (fibrous)	
OSHA PEL as 8 hr TWA	1 fiber/cm <sup>3</sup> (1992)
2016 CDR TSCA Inv	No related links

**Appropriate Engineering Controls:** Use dust suppression controls. Local exhaust ventilation, point of generation dust collection and/or down-draft work stations to minimize airborne dust generation are recommended when machining product.

**Recommendations for Personal Protective Measures**

Respiratory Protection:	Use appropriate protection pursuant to OSHA 29CFR 1910.134 and 29CFR 1926.103. The following information is provided as a guide and reflects industry recommendations for control of dust.
PPE < 1.0 f/cc	No specific recommendation, use personal protective equipment based on local conditions.
PPE 1.0 f/cc to 5.0 f/cc	Half-face, air purifying respirator equipped with a high efficiency particulate air (HEPA) filter cartridge.
PPE 5.0 to 25 f/cc	Full-face, air purifying respirator equipped with a high-efficiency particulate air (HEPA) filter cartridge
PPE > 25 f/cc	Full-face, positive pressure, supplied air respirator.
PPE Other	Work clothes should be washed separately and the washing machine rinsed following use. If possible, do not take work clothes home following machining or removal activities that produce significant amounts of dust.
Skin Protection	Wear gloves, head coverings and full body clothing to prevent skin irritation. Disposable clothing may be used. Store work clothes and street clothes separately.
Eye Protection	Wear safety glasses or chemical goggles to prevent eye contact. Do not wear contact lenses without goggles. Do not get dust or liquids into eyes. Have eye washing facilities available when using products.

These Products are generally not hazardous during normal use. These guidelines are provided for special circumstances involved in machining use and or after service removals. See Section 7 for after service and Section 13 for disposal recommendations.

Section 9: Physical and Chemical Properties

**Physical and Chemical Properties**

Appearance		Odor	pH	Melting Point	Specific Gravity
Physical State	Color				
Thread, yarn, braid, cloth and tape textile forms.	White	Odorless	N/A	<1800°C (3272°F)	2.5-3.5

Note: Freezing point, initial boiling point and boiling range, flash point, evaporation rate, flammability, upper/lower flammability or explosive limits, vapor pressure, vapor density, partition coefficient: n-octanol/water, auto-ignition temperature, decomposition temperature and viscosity are irrelevant and/or unavailable to/for these materials.

**Section 10: Stability and Reactivity**

**Chemical Stability:** Materials are stable with no possibility of hazardous reactions or polymerization.

**Chemical Incompatibilities:** Powerful oxidizers; fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, etc.

**Hazardous Decomposition Products:** None

**Section 11: Toxicological Information**

**Exposure Routes and Effects**

**Inhalation:** Dust may cause temporary irritation or soreness of throat and nose. Dust should not be inhaled as it may cause permanent lung injury (silicosis).

**Eye Contact:** Products can be severe physical irritants to eyes

**Skin Contact:** May cause temporary dryness, irritation or rash.

**Ingestion:** Ingestion is unlikely. May cause gastrointestinal disturbances. Never induce vomiting without the advice of a physician.

**Medical Conditions Aggravated by Exposure:** Respiratory effects may be aggravated by smoking. Pre-existing respiratory problems may be aggravated by dust.

**Carcinogenity**

Aluminatesilicate (fibrous)
AS-7M fibers are considered to be non-respirable and, therefore unlikely to pose a cancer risk. Respirable fibers are defined by the World Health Organization as having lengths greater than 5 micron, diameters less than 3 micron and aspect ratios greater than 3:1. AS-7M fiber diameter is from 7 to 10 micron and are continuous in length.

**Description of Symptoms:** See Exposure Routes and Effects, Hazard Statement(s) and Precautionary Statement(s) sections above.

## Section 12: Ecological Information

**Eco toxicological Information:** No information available.

**Solubility:** AS-7M fibers are not soluble in water and represent no hazard to water based ecosystem.

**Distribution:** Aluminum oxide and silica are naturally occurring and are widely distributed in igneous rock. Secondary deposits in sedimentary rock may be found.

**Chemical Fate Information:** The relative inertness of these materials indicates that they may be highly persistent in the environment. No information regarding any negative effects of this persistence has been noted.

## Section 13: Disposal Consideration

**Disposal:** Consult with local, state and federal regulations. In most cases these materials may be land filled safely. Refer to Section 8 for instructions regarding Exposure Controls/Personal Protection.

**Hazardous Waste Classification:** Materials are not regulated hazardous materials.

**Empty Containers:** Empty containers may contain product dust or residue. Do not re-use.

## Section 14: Transportation Information

Materials are not regulated hazardous substances, no specific regulations apply.

## Section 15: Regulatory Information

Aluminatesilicate (fibrous) CAS No. 1327-36-2 carries no GHS Hazardous Ingredients Classification.

## Section 16: Other

Disclaimer:

The information contained herein is based on data considered to be accurate as of the preparation or revision date. It is provided in good faith and in compliance with state and federal regulations. No warranty or representation, express or implied is made as to the accuracy or completeness of this information. Other national, state and/or local regulations may apply.