



WHEN THE **HEAT** IS ON, KEEP YOUR COOL WITH **AVS!**

Safety Data Sheet (SDS)

SDS-123
May 2019

Product: AVSi[®] Alum 84CH, AVSi[®] Alum 188CH

1. Chemical Product and Company Identification

Trade Name: AVSi[®] Alum 84CH, AVSi[®] Alum 188CH

Synonyms: Aluminized Silica Textiles

Manufacturer:

AVS Industries LLC
21 Bellecor Drive
Unit C
New Castle, DE 19720

Phone Product Information (302) 221-1720
Revision Date: May 31, 2019

DESCRIPTION

No Hazard Rating is available for this Product.

2. Hazard Identification

Emergency Overview

Off-White or tan colored flexible woven fabric with no odor; silver-grey color on the other side. Avoid inhalation of decomposition gases (over 400° F).

Effects of Overexposure:

Eye Contact: Slight irritation may be caused in contact with eyes.

Skin Contact: Temporary irritation of skin may be produced.

Inhalation: Inhalation of airborne fibers may cause irritation to the mouth, nose and throat.

Ingestion: May cause temporary irritation of the digestive tract, but not an expected route of entry in industrial uses.

Chronic Hazards: There are no known chronic health effects associated with the use of this product under normal working conditions.

Primary Routes of Entry: Skin contact, inhalation, ingestion & eye contact.

Carcinogenicity Information: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as carcinogen.

Product: AVSil® Alum 84CH, AVSil® Alum 188CH

3. Composition and Information on Ingredients

Ingredient(s)	CAS Number	Approx. Percent
Amorphous Silica	7631-86-9	97%
Proprietary Surface Finish	None Assigned	*0.3%-0.5%
Aluminized Polyester Film	None Assigned	<2%
Adhesive (Trade Secret)	None Assigned	Trade Secret

*% of actual coating as a % of the base material

4. First Aid Information

Eye Contact: Flush eyes immediately with large amounts of water for at least 15 minutes holding eyelids open while flushing. Seek medical attention promptly.

Skin Contact: Wash contaminated skin thoroughly with mild soap and cool water. Seek medical attention if irritation persists.

Inhalation: Remove person from source of exposure and then seek medical attention immediately.

Ingestion: Seek medical attention immediately.

5. Fire Fighting Measures

Flash Point: N.A.

Lower Explosive Limit (%): N.A.

Upper Explosive Limit (%): N.A.

Autoignition Temperature: N.D.

Extinguishing Media: Carbon dioxide, water, foam or dry chemical for type of surrounding fire.

Unusual Fire & Explosion Hazards: During sustained fire irritating and/or toxic gases may be generated by combustion.

Fire Fighting Instructions: Wear full fire fighting protective equipment including self-contained breathing apparatus.

6. Accidental Release Measures

Step to be taken in case material is released or spilled:

Dust or loose fibers can be vacuumed or swept with the aid of a dust suppressant.

Dispose according to federal, state, and local environmental regulations.

7. Handling and Storage

Keep material in a clean dry place, and keep container closed.

Particular care should be taken when working with "used" material to minimize dust. If exposure limits are exceeded or if irritation is experienced, NIOSH approved respiratory protection should be worn.

Product: AVSil® Alum 84CH, AVSil® Alum 188CH

8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS:

Ventilation: General ventilation and/or local exhaust ventilation are adequate.

Respiratory Protection: Respirators are not necessary under normal working conditions.

Eye Protection: Eye protection is not necessary under normal working conditions.

Protective Clothing: Protective Clothing is not necessary under normal working conditions.

Hygienic Practices: Use good personal hygiene practices.

EXPOSURE LIMITS:

Amorphous Silica

PEL (OSHA) 80mg/m³ ÷ % SiO₂ or 20 mppcf

TLV (ACGIH) 10 mg/m³ (inhalable fraction); 3 mg/m³ (respirable fraction)

NIOSH 6 mg/m³

IDHL 3000 mg/m³

Hydrocarbon Coating: This product is not considered hazardous as defined by 29 CFR 1910.1200 (OSHA Hazcom Standard)

Aluminized Polyester Film

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

Adhesive (Trade Secret)

PEL (OSHA) N.E.

TLV (ACGIH) N.E.

9. Physical and Chemical Properties

PHYSICAL DATA: (Silica Fabric Only):

Boiling Point: 4046° F

Melting Point: >3000° F

Solubility in Water: Insoluble

Vapor Pressure: N.D.

Vapor Density: N.D.

Specific Gravity: 2.2

Color: Off-white or tan colored on one side; silver-grey color on other side.

Odor: None

Physical State: Woven Fabric

10. Stability and Reactivity

Chemical Stability: Product is stable at normal temperature and storage conditions.

Incompatibilities: Basic phosphates, hydrofluoric acid, and some oxides and hydroxides will attack the silica fabric. The aluminum film will be attacked by mineral acids and strong alkalis.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Hazardous Combustion and Decomposition Products (Coating Only): Oxidation of the coating produces carbon monoxide and carbon dioxide, as well as other unidentified organic compounds.

Product: AVSil® Alum 84CH, AVSil® Alum 188CH

11. Toxicological Information

Material which has been subjected to elevated temperatures (>1800°F) may undergo partial conversion to cristobalite, a form of crystalline silica, which may cause respiratory illness. The amount of cristobalite present will depend on the temperature and length of service. The OSHA PEL for cristobalite is 0.05 mg/m³ (respirable).

12. Ecological Information

No information is available; however, toxicity is expected to be low based on the insolubility in water of the product.

13. Disposal Considerations

Dispose of waste material in accordance with applicable federal, state, and local environmental regulations. This material is not regulated under RCRA hazardous waste regulations.

14. Transportation Information

DOT Proper Shipping Name: AVSil Aluminized Textiles
DOT Hazardous Class: None
DOT UN/NA Number: None
Emergency Response Guide Number: None

15. Regulatory Information

U.S. FEDERAL REGULATIONS AS FOLLOWS:

SARA Section 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372: None

TSCA: The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION: This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States: None

INTERNATIONAL REGULATIONS AS FOLLOWS:

Canadian WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS CLASS: Not Regulated.

Product: AVSil® Alum 84CH, AVSil® Alum 188CH

16. Other Information

This Material Safety Data Sheet was revised in its entirety in May 2019.

ABBREVIATIONS:

- 1) ACGIH – American Conference of Governmental Industrial Hygienists
- 2) OSHA – Occupational Safety and Health Administration
- 3) NIOSH – National Institute of Occupational Safety and Health
- 4) IARC – International Agency for Research on Cancer
- 5) NTP – National Toxicology Program
- 6) TLV – Threshold Limit Value
- 7) PEL – Permissible Exposure Limit
- 8) TWA – Time Weighted Average
- 9) STEL – Short Term Exposure Limit
- 10) IDHL – Immediately Dangerous to Life or Health
- 11) N.A. – Not Applicable
- 12) N.D. – Not Determined
- 13) N.E. – Not Established
- 14) DSL – Domestic Substances List

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE BASED ON THE MOST CURRENT DATA AVAILABLE. AVS INDUSTRIES MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND ASSUMES NO LIABILITY RESULTING FROM ITS USE. USERS ARE ADVISED TO CONDUCT THEIR OWN TESTS TO DETERMINE THE SAFETY AND SUITABILITY OF EACH PRODUCT OR PRODUCT COMBINATION FOR THEIR OWN PURPOSES. AVS INDUSTRIES SHALL NOT BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR INCIDENTAL OR CONSEQUENTIAL DAMAGES, HOWSOEVER ARISING EVEN IF AVS INDUSTRIES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.