

AT 4400 - THERMAL PROTECTION COATING

NANO-CERAMIC COATING

SAFETY DATA SHEET

1. COMPANY AND PRODUCT INFORMATION

Company Name: ALPHATEK MATERIALS
Company Address: 2372 Morse Ave., Ste. 167, Irvine, CA 92614
Tel: 1-949-387-4271
Last Issue Date: 5/27/2017

Product Number: AT 4400 – THERMAL PROTECTION COATING
Chemical Name: Silane Mixture
Chemical Family: Polymeric Resin-Solvent Blend
Chemical Formula: Proprietary Blend

Product Use: Semi-Clear, High Temperature Thermal Insulation Coating

2. HAZARDS IDENTIFICATION

HMIS RATINGS:

Health Hazard	1
Flammability Hazard	3
Reactivity Hazard	0
PPH	H

LABEL STANDARD:

HEALTH	1
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	H

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EMERGENCY OVERVIEW:

Single Word: Warning

ROUTES OF ENTRY:

Eyes, Skin, Inhalation, Ingestion

POTENTIAL HEALTH EFFECTS

SHORT-TERM EXPOSURE (ACUTE):

Inhalation: May cause respiratory tract irritation. At higher vapor concentrations, inhalation may affect central nervous systems.

Eyes: May cause irritation

Skin: May cause irritation through absorption

Ingestion: Harmful if swallowed

REPEATED EXPOSURE (CHRONIC):

No known application information at this time.

Synergistic Materials: No known application information at this time.

Medical Conditions Aggravated by Exposure: No known application information at this time.

REPEATED EXPOSURE (CHRONIC):

OSHA: N/A

ACGIH: N/A

NTP: N/A

IARC: N/A

OTHER: There are no known carcinogenic ingredients present at over 0.1% in this material.

SECTION 2 NOTES: Above information is based off of standard industrial use of this product. Abnormal use and contact may result in increased damage and irritation to all affected areas.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS NUMBER	CHEMICAL NAME	PERCENTAGE VALUE (%)
107-51-7	Trisiloxane, Octamethyl-silazane Proprietary Mixture	60-80
682-01-9	Silicic Acid (H ₄ SiO ₄), Tetrapropyl Ester	1-3
18765-38-3	Silicic Acid (H ₄ SiO ₄), Tetralis(2-butoxyethyl ester)	1-2
7631-89-9	Trimethylsilated Silica Gel	3-6
Section 3 Notes: Unlisted ingredients are not in SARA classification and are deemed proprietary		15-40

4. FIRST AID MEASURES

Eye Contact:

Immediately flush with water for at least 15 minutes. If irritation persists, seek medical attention.

Skin Contact:

Wash contact area thoroughly with soap and water. Wash clothing separately from other garments. If irritation persists, stop using garments and seek medical advise.

Inhalation:

Remove to fresh air. If breathing is difficult, have trained person administer oxygen and seek medical attention.

Ingestion:

Do not induce vomiting. Seek medical attention immediately.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

Administration of absorbents may be of value.

SECTION 4 NOTES: Always wear protective eyewear, gloves and clothing when handling any chemicals.

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5. FIRE FIGHTING MEASURES

Flammable Limits in Air:

Not determined at this time.

Flash Point: 100°F / 38°C

*Method Used: Closed Cup

Auto-Ignition Temperature: 590°F / 310°C

Extinguishing Media:

Carbon Dioxide, Dry Chemical Powder, Extinguishing Foam Media.

Fire Fighting Procedures:

Evacuate all unnecessary personnel. Shut down all electrical devices in exposed area. Use water to keep adjacent containers cool to prevent pressure build-up. Wear self-contained breathing apparatus and full protective clothing.

Fire and Explosion Hazard:

Container explosion may occur under fire conditions. Toxic fumes from container may be emitted under fire conditions.

Hazardous Decomposition Products:

Chlorine containing gas, Fluorine containing gas, may be discharged upon decomposition.

SECTION 5 NOTES:

Avoid static charge build-up. Static charge could ignite heavy vapors.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:

Determine to evacuate or isolate the area according to your local emergency plan. For large spills, supply emergency diking to contain materials. After removal of bulk material, the use of an absorbent is needed for final clean up.

Remove waste materials to a location per your local waste management regulations, state or Federal regulations.

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SECTION 6 NOTES:

Always wear personal protective equipment when handling all types of chemicals and waste products. Refer to section 8 for Personal Protective Equipment.

7. HANDLING AND STORAGE

Storage and Handling:

Store in cool dry location with adequate ventilation. Do not store in direct sunlight. Keep containers tightly sealed when not in use. Avoid leaving open containers during use.

Store in temperatures between 55°F (13°C) and 80°F (27°C).

Other Precautions:

Always wear protection clothing when handling all chemicals. See section 8 for details.

SECTION 7 NOTES:

Do not smoke when handling materials. Keep away from moisture and standing water.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Appropriate Hygiene Practices:

The use of proper cleaning soaps and solutions for all body parts is recommended. Eye wash stations and showers in accordance with OSHA and local safety regulations is advised and in close proximity.

Engineering Controls:

Local and general ventilation is recommended.

Respiratory:

Use respiratory protection unless adequate ventilation is in place and has been assessed to provide proper air movement for recommended exposure. Follow OSHA requirements for respirator regulations 29CFR 1910.134.

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Eyes/Face:

Always wear protective eyewear or goggles. Recommend use of full-face respirator or large volume handling and spills.

Skin:

Chemical protective gloves are always recommended. Wash exposed skin immediately if contact with chemical occurs

Other Protective Clothing or Equipment:

The use of chemical resistant aprons, shoe covers and face shields is recommended for any handling of chemicals.

Exposure Guidelines:

Refer to sections 4, 7, and 8 for contact and exposure recommendations

SECTION 8 NOTES:

Note that all of these precautions are based off of room temperature handling. Elevated temperatures may increase the need for extra care in handling of materials.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Clear Liquid / Solvent to Naphthalenic Odor
VOC (grams / liters):	0.0g/L <i>*VOC content less exempt compounds: 560g/L per 40CFR51.100(s).</i>
Freezing Point:	-32°F / -36°C
Viscosity:	12-17 Seconds (#2 Zahn Cup) @77°F / 25°C
Flash Point:	100°F / 38°C
Boiling Point:	>282.2°F / >139°C
Specific Gravity:	0.889 @ 68°F / 20°C
Solids (%):	<38
Molecular Weight:	<55ps

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10. STABILITY AND REACTIVITY

- Stability:** Stable
- Incompatibility (Materials to Avoid):** Oxidizers, Isocyanates, Water, Protic Solvents, Mineral Acids and Alkalis
- Hazardous Polymerization:** Will Not Occur
- Hazardous Decomposition Products:** Chlorine containing gasses, Fluorine containing gasses, Carbon Monoxide, Carbon Dioxide and Silicon Dioxide.
- Conditions to Avoid (Polymerization):** N/A

SECTION 10 NOTES: The above criteria may not be all the materials that affect stability, but per testing, the above information is true to the best of our knowledge.

11. TOXOLOGICAL INFORMATION

Carcinogenicity Information:

Not listed as carcinogen by NTP (National Toxicology Program); not regulated as a carcinogen by OSHA (Occupational Safety and Health Administration); not evaluated by IARC (International Agency for Research on Cancer)

Reported Human Effects:

No human studies have been conducted with this material. The use of this material when used as directed should not have any adverse effects.

12. ECOLOGICAL INFORMATION

This material may be hazardous to aquatic organisms. Avoid release to surface waters and waste treatment systems.

13. DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD:

Do not mix this product with aqueous or other protic waste streams. Incineration of combustible waste material in a permitted facility in accordance with the local, state, and federal regulations is the recommended disposal method.

RCRA HAZARD CLASS:

I / Ignitable

SECTION 13 NOTES:

Local and state regulations may exceed federal standards. Always consult your local waste authority for proper disposal requirements.

14. TRANSPORTATION INFORMATION

US DOT:

Proper Shipping Name: Paint Related Materials

Hazard Class: 3

UN Number: 1263

Packing Group: III

Label Statement: Flammable Liquid



WATER TRANSPORTATION:

Proper Shipping Name: Paint Related Materials

Hazard Class: 3

UN Number: 1263

Packing Group: III

EmS No.: 30 S-E, F-E

Label Statement: Flammable Liquid



AIR TRANSPORTATION:

ALPHATEK MATERIALS, LLC

2372 Morse Ave., Ste. 167, Irvine, CA 92614

contact@alphatekmaterials.com

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Proper Shipping Name: Paint Related Materials

Hazard Class: 3

UN Number: 1263

Packing Group: III

Label Statement: Flammable Liquid



CONSUMER COMMODITY:

ID Number: 8000

Hazard Class: 9

Label Statement:



Label ORM-D Domestic:



15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA (Toxic Substance Control Act):

All chemical substances in this material are on or exempted from the listing on the TSCA Inventory of Chemical Substances.

CERCLA (Comprehensive Response Compensation and Liability Act):

None

SARA TITLE III (Superfund Amendments and Reauthorization Act):

None

311/312 HAZARD CATEGORIES:

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Acute: No

Chronic: No

Fire: Yes

Pressure: No

Reactive: no

313 REPORTABLE INGREDIENTS:

None present or none present in regulated quantities.

STATE REGULATIONS:

Exempt list per 40CFR51.100(s).

INTERNATIONAL REGULATIONS:

Subject to specific country, province, state or district regulations.

16. OTHER INFORMATION

Prepared By: AlphaTek Materials, LLC.

Disclaimer:

All statements and information in this safety data sheet (SDS) is believed to be accurate as of the date issued and represents the best information currently available to AlphaTek Materials, LLC. No warranties, expressed or implied, including, but not limited to the warranty of merchantability, fitness for a particular purpose or of any other nature, are made herein as to the information provided or the product to which the information refers. Users should make their own investigations to determine the suitability of the information provided.