

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TriSeam
Product Use Description: Seam sealant for roof systems
Manufacturer: NanoTech Materials, Inc.
 21401 Park Row Drive #360
 Katy, TX 77449
Email: info@nanotechmaterials.com
Telephone: 1-(888) 296-6266

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Physical hazards: Not Classified
Health hazards: Carc. 1A – H350
Environmental hazards: Not Classified

GHS Label Elements

Hazard Pictograms:



Signal Word: Warning
Hazard Statements: H350 May cause cancer.
Contains: Quartz (SiO₂)

Precautionary Statements

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313: If exposed or concerned: Get medical advice/attention.
P405: Store locked up.
P501: Dispose of contents/container in accordance with national regulations.

Other Hazards

This product does not contain any substances classified as PBT or vPvB.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredient	CAS Number	Concentration	Classification
Limestone	1317-65-3	25 – <50%	Not Classified
Titanium dioxide	13463-67-7	2.5 – <5%	Not Classified

Quartz (SiO ₂)	14808-60-7	0.25 – <0.5%	Carc. 1A – H350 STOT RE 1 – H372
Ammonia	1336-21-6	0.025 – <0.25%	Skin Corr. 1B – H314 Eye Dam. 1 – H318 STOT SE 3 – H335 Aquatic Acute 1 – H400
Diiron trioxide	1309-37-1	0.025 – <0.25%	Not Classified
Carbon black	1333-86-4	0.025 – <0.25%	Not Classified
2-Butoxyethanol	111-76-2	<0.025%	Acute Tox. 4 – H302 Acute Tox. 4 – H312 Acute Tox. 4 – H332 Skin Irrit. 2 – H315 Eye Irrit. 2A – H319

The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200. The full text for all hazard statements is displayed in Section 16.

4. FIRST-AID MEASURES

Description of First Aid Measures

General Information:

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Inhalation:

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Ingestion:

Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Skin Contact:

Wash skin thoroughly with soap and water.

Eye Contact:

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

Protection of First Aiders:

First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

Most Important Symptoms and Effects, Both Acute and Delayed

General Information:

See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation:	Prolonged inhalation of high concentrations may damage respiratory system. Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.
Ingestion:	Gastrointestinal symptoms, including upset stomach.
Skin Contact:	Prolonged contact may cause dryness of the skin. Discoloration of the skin.
Eye Contact:	May cause temporary eye irritation.

Indication of Immediate Medical Attention and Special Treatment Needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable Extinguishing Media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific Hazards:	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous Combustion Products:	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. Acrylic monomers. Carbon dioxide (CO ₂). Carbon monoxide (CO).
Protective Actions During Firefighting:	Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.
Special Protective Equipment for Firefighters:	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard firefighter clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Do not touch or walk into spilled material. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Ensure procedures and training for emergency decontamination and disposal are in place. Wash thoroughly after dealing with a spillage.
Environmental Precautions:	Avoid discharge into drains and the aquatic environment.
Methods for Cleaning Up:	Do not touch or walk into spilled material. Wear protective clothing as described in Section 8 of this safety data sheet. Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. For waste disposal, see Section 13. Wash thoroughly after dealing with a spillage.
Reference to Other Sections:	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Usage Precautions:

Read and follow manufacturer's recommendations. Keep away from food, drink and animal feeding stuffs. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Handle all packages and containers carefully to minimize spills. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Keep container tightly sealed when not in use. Do not reuse empty containers.

Occupational Hygiene:

Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Precautions:

Store away from incompatible materials (see Section 10). Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store locked up. Keep containers upright. Protect containers from damage. Store at temperatures between 1°C and 49°C. Do not store for more than 12 months.

Storage Class:

Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits

Ingredient	CAS No.	OSHA PEL	ACGIH TLV	IDLH
Limestone	1317-65-3	5 mg/m ³ resp. 15 mg/m ³ total	—	—
Titanium dioxide	13463-67-7	15 mg/m ³ total	10 mg/m ³ (A4)	5000 mg/m ³
Quartz (SiO ₂)	14808-60-7	—	0.025 mg/m ³ resp. (A2)	50 mg/m ³
Ammonia	1336-21-6	50 ppm / 35 mg/m ³	25 ppm TWA 35 ppm STEL	300 ppm
Diiron trioxide	1309-37-1	5 mg/m ³ resp. 15 mg/m ³ total 10 mg/m ³ fume	5 mg/m ³ resp. (A4)	2500 mg/m ³
Carbon black	1333-86-4	3.5 mg/m ³	3 mg/m ³ inhal. (A3)	1750 mg/m ³
2-Butoxyethanol	111-76-2	50 ppm / 240 mg/m ³ (Sk)	20 ppm / 97 mg/m ³ (A3)	700 ppm

OSHA = Occupational Safety and Health Administration. ACGIH = American Conference of Governmental Industrial Hygienists. A2 = Suspected Human Carcinogen. A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans. A4 = Not Classifiable as a Human Carcinogen. Sk = Danger of cutaneous absorption.

Exposure Controls

Appropriate Engineering Controls:

Provide adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained.

Eye/Face Protection:

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. Tight-fitting safety glasses.

Hand Protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Frequent changes are recommended.
Other Skin/Body Protection:	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Respiratory Protection:	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly.
Hygiene Measures:	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Environmental Exposure Controls:	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Color:	Various colors
Odor:	Amine
Odor Threshold:	Not available
pH:	Not available
Melting Point:	Not available
Initial Boiling Point and Range:	100°C
Flash Point:	Not applicable. Water based product. Solid material will support combustion if water has been evaporated.
Evaporation Rate:	Not available
Upper/Lower Flammability or Explosive Limits:	Not available
Vapor Pressure:	17 mm Hg @ 20°C
Vapor Density:	Not available
Relative Density:	1.44
Solubility(ies):	Not known
Partition Coefficient:	Not available
Auto-ignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not applicable
Explosive Properties:	Not considered to be explosive
Oxidizing Properties:	Does not meet the criteria for classification as oxidizing

10. STABILITY AND REACTIVITY

Reactivity:	See the other subsections of this section for further details.
Stability:	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of Hazardous Reactions:	No potentially hazardous reactions known.
Conditions to Avoid:	Avoid exposure to high temperatures or direct sunlight. Avoid freezing.
Materials to Avoid:	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous Decomposition Products:	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. Acrylic monomers. Carbon dioxide (CO ₂). Carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity – Oral:	Based on available data the classification criteria are not met.
Acute Toxicity – Dermal:	Based on available data the classification criteria are not met.
Acute Toxicity – Inhalation:	Based on available data the classification criteria are not met.
Skin Corrosion/Irritation:	Based on available data the classification criteria are not met.
Serious Eye Damage/Irritation:	Based on available data the classification criteria are not met.
Respiratory Sensitization:	Based on available data the classification criteria are not met.
Skin Sensitization:	Based on available data the classification criteria are not met.
Germ Cell Mutagenicity:	Based on available data the classification criteria are not met.
Carcinogenicity:	May cause cancer.
IARC Carcinogenicity:	Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.
Reproductive Toxicity – Fertility:	Based on available data the classification criteria are not met.
Reproductive Toxicity – Development:	Based on available data the classification criteria are not met.
STOT – Single Exposure:	Not classified as a specific target organ toxicant after a single exposure.
STOT – Repeated Exposure:	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration Hazard:	Based on available data the classification criteria are not met.

General Information

General:	May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation:	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion:	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin Contact:	Prolonged contact may cause dryness of the skin. Discoloration of the skin.
Eye Contact:	May cause temporary eye irritation.
Route of Exposure:	Ingestion. Inhalation. Skin and/or eye contact.

Target Organs: No specific target organs known.

Specific target organ toxicity – Single exposure: No data available

Aspiration Hazard: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity: Based on available data the classification criteria are not met.

Persistence and Degradability: The degradability of the product is not known.

Bioaccumulative Potential: No data available on bioaccumulation.

Partition Coefficient: Not available.

Mobility in Soil: No data available.

Other Adverse Effects: None known.

13. DISPOSAL CONSIDERATIONS

General Information: Reuse or recycle products wherever possible. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal Methods: Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. TRANSPORT INFORMATION

General: The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number: Not applicable.

UN Proper Shipping Name: Not applicable.

Transport Hazard Class(es): No transport warning sign required.

Packing Group: Not applicable.

Environmentally Hazardous Substance: No.

DOT Reportable Quantity: Not applicable.

Transport in Bulk (MARPOL Annex II / IBC Code): Not applicable.

15. REGULATORY INFORMATION

U.S. Federal Regulations

Regulatory Status: Classified in accordance with Appendix A, Appendix B and Appendix F of the OSHA Hazard Communication Standard 29 CFR §1910.1200.

- **SARA Section 302**
None of the ingredients are listed or exempt.
- **CERCLA/Superfund RQ**
Ammonia – Final CERCLA RQ: 1000 (454) pounds (kilograms)
- **SARA 313 Emission Reporting**
Ammonia: 1.0% 2-Butoxyethanol: 1.0%
- **CAA Accidental Release Prevention**
None of the ingredients are listed or exempt.
- **OSHA Highly Hazardous Chemicals**
None of the ingredients are listed or exempt.

U.S. State Regulations

- **California Proposition 65 Carcinogens and Reproductive Toxins**
 - **The following ingredients are listed:**
 - Benzophenone – Known to the State of California to cause cancer.
 - Carbon black – Known to the State of California to cause cancer.
 - Titanium dioxide – Known to the State of California to cause cancer.
 - Silicon dioxide – Known to the State of California to cause cancer.

State Right-to-Know Lists

- **Massachusetts**
Ammonia, Quartz (SiO₂), Limestone, 2-Butoxyethanol, Carbon black, Titanium dioxide, Diiron trioxide, Silicon dioxide
- **Rhode Island**
Quartz (SiO₂), Limestone, 2-Butoxyethanol, Propane-1,2-diol, Carbon black, Titanium dioxide, Diiron trioxide
- **Minnesota**
Benzophenone, Quartz (SiO₂), Limestone, 2-Butoxyethanol, Propane-1,2-diol, Carbon black, Titanium dioxide, Diiron trioxide, Silicon dioxide
- **New Jersey**
Ammonia, Quartz (SiO₂), Limestone, 2-Butoxyethanol, Propane-1,2-diol, Carbon black, Titanium dioxide, Diiron trioxide
- **Pennsylvania**
Ammonia, Quartz (SiO₂), Limestone, 2-Butoxyethanol, Propane-1,2-diol, Carbon black, Titanium dioxide, Titanium dioxide (Rutile), Diiron trioxide, Silicon dioxide

Inventories

- **US – TSCA**
All ingredients are listed or exempt.
- **US – TSCA 12(b) Export Notification**
Benzophenone.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Source of Information: Internal company data, suppliers and other publicly available resources.

Further Information: Contact supplier (see Section 1)

Disclaimer:

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.