SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**Wildfire Shield**
Product code	2019-005
Trade name	Wildfire Shield
Chemical Family:	White elastomeric coating
Identified Use(s)	Fire protection
Uses Advised Against	Not Known.
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

US CFR 1910.1200:	Not classified as dangerous for supply/use.

Label elements: According to US CFR 1910.1200

Hazard Pictograms:	None.
Signal Word:	None.
Hazard Statements:	None.
Precautionary Statements:	None.

Other hazards

Hazards not otherwise classified:	Irritation to eyes: Irritant by mechanical action. Causes mild skin irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances:	Not applicable.
Mixtures:	No Hazardous Substance(s) or Complex Substance(s) required for disclosure.

The specific chemical component identifies and/or he exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200

(I)(1). Trace ingredients (if any) are present in < 1% concentration, (<0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation:	Unlikely route of exposure. Seek medical advice if necessary.
Skin Contact:	Wash skin with water. Wash contaminated clothing before reuse.
Eye Contact:	Flush eyes for at least 15 minutes. Seek medical advice if necessary.
Ingestion:	Wash out mouth with water.
Most important symptoms and effects, both acute and delayed:	None anticipated. Treat symptomatically.
Indication of any immediate medical attention and special treatment needed:	Unlikely to be required but if necessary treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	As appropriate for surrounding fire.
Unsuitable Extinguishing Media:	None known.
Special hazards arising from the substance or mixture:	Non anticipated. Heating may cause decomposition.
Advice for firefighters:	Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Provide adequate ventilation. Wear suitable gloves if prolonged skin contact is likely.
Environmental precautions:	Do not release large quantities into the surface waterways or into drains.
Methods and material for containment and cleaning up:	Adsorb spillages onto sand, earth or any suitable adsorbent material. Collect as much as possible in clean container for reuse or disposal.
Reference to other sections:	See Also Section 8, 13.

7. HANDLING AND STORAGE

Precautions for safe handling:	Keep container closed when not in use. Avoid contact with skin and eyes.
Conditions for safe storage, including any incompatibilities:	Do not store or carry the substance in direct sunlight. Keep container/package tightly closed in a cool, well-ventilated place. Keep away from direct sunlight. Maximum allowed stacking: 3 drums.
Storage temperature:	Ambient.
Storage life:	Stable under normal conditions.
Incompatible materials:	None known.
Specific end uses:	Not known.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m3)	STEL (ppm)	STEL (mg/m3)	Note:
Amorphous, including natural diatomaceous earth (Total dust)	7631-86-9		6			CAL-OSHA
PEL_Table Z-3						
Amorphous, including natural diatomaceous earth (Respirable)	7631-86-9		3			CAL-OSHA
PEL_Table Z-3						
Amorphous, including natural diatomaceous earth	7631-86-9		6			NIOSH REL Z-3
Amorphous, including natural diatomaceous earth	7631-86-9		80			OSHA PEL_ Table Z-3, (3a), (3e)
Silica, amorphous, precipitated and gel	112926-00-8					OSHA PEL Z-1, (n1)
Aluminum, metal and insoluble compounds	1344-28-1		1			ACGIH TLV, R, A4
apha-Aluminum (Total dust)	1344-28-1		10			OSHA PEL
apha-Aluminum (Respirable fraction)	1344-28-1		5			OSHA PEL
Aluminum, metal and insoluble compounds (as Al) (Total dust)	1344-28-1		10			NIOSH REL Z-1
Aluminum, metal and insoluble compounds (as Al) (Respirable fraction)	1344-28-1		5			NIOSH REL Z-1
Aluminum Oxide (Total dust)	1344-28-1		15			OSHA PEL Z-1
Aluminum Oxide (Respirable fraction)	1344-28-1		5			OSHA PEL Z-1
Aluminum, metal and insoluble compounds (as Al) (Total dust)	1344-28-1		15			OSHA PEL Z-1
Aluminum, metal and insoluble compounds (as Al) (Respirable fraction)	1344-28-1		5			OSHA PEL Z-1
Synthetic vitreous fibers, continuous filament glass fibers	65997-17-3		5			ACGIH TLV, I, A4
Synthetic vitreous fibers, continuous filament glass fibers	65997-17-3	1				ACGIH TLV, f/cc (a), F, A4
Synthetic vitreous fibers, rock wool fibers	65997-17-3	1				ACGIH TLV, f/cc (a), F, A3
Mineral wool fiber	65997-17-3		5			NIOSH REL Z-1, (p)

Synthetic vitreous fibers, continuous filament glass fibers	65997-17-3		5			NIOSH REL Z-1, (v)

Remark	Notes
CAL-OSHA PEL_Table Z-3	California Division of Occupational Safety and Health (CAL-OSHA) Permissible Exposure Limits (PELs) Table Z-3 Mineral Dusts, 2019
NIOSH REL Z-3	National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs) from the NIOSH Pocket Guide to Chemical Hazards table Z-3 Mineral Dusts, 2019
OSHA PEL_Table Z-3	Occupational Safety and Health (OSHA) Permissible Exposure Limits (PELs) Table Z-3 Mineral Dusts, 2019
(3a)	20 mppcf (Millions of particles per cubit foot of air, based on impinger samples counted by light-field techniques. Con-version factors - mppcf x 35.3 = million particles per cubic meter = particles per c.c.)
(3e)	The PEL in mg/m3 is calculated by dividing by the percentage SiO2 + 2
OSHA PEL Z-1	Occupational Safety and Health (OSHA) Permissible Exposure Limit (PEL) from 29 CFR 1910.1000 Z-1 Table, 2021
(n1)	20 mppcf (million particles per cubic foot) or 80 mg/m3 / %SiO2
ACGIH TLV	The American Conference of Government Industrial Hygienists (ACGIH®) Threshold Limit Values (TLVs®), 2021
R	Measured as respirable fraction of the aerosol
A4	Not Classifiable as a human Carcinogen
OSHA PEL	Occupational Safety and Health (OSHA) Permissible Exposure Limits (PELs), 2019
NIOSH REL Z-1	National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs) from the NIOSH Pocket Guide to Chemical Hazards table Z-1: Up to 10-hour time weighted average (TWA) during a 40-hour work week, 2021
I	Measured as Inhalable fraction of the aerosol
f/cc (a)	fiber per cubic centimeter
F	Respirable fibers: length > 5 µm, aspect ration ≥ 3:1, as determined by the membrane filter method at 400-450X magni-fication (4-mm objective), using phase contrast illumination
A3	Confirmed Animal Carcinogen with Unknown Relevance to Humans
(p)	Total Mineral wool dust or 3 f/cc TWA (fibers ≤3.5 µm diam, ≥ 10 µm length)
(v)	Total fibrous glass or 3 (fib ≤3.5 µm diam, ≥ 10 µm length)

Exposure controls

Appropriate engineering controls: Ensure adequate ventilation.

Personal protection equipment



Eye Protection: Wear eye protection with side protection.



Skin protection: Wear suitable protective clothing, boots and gloves.



Respiratory protection: Normally no personal respiratory protection is necessary. Wear respiratory protection if necessary.

Thermal hazards:	None known.
Environmental Exposure Controls:	Do not release large quantities into the surface water or into drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:	Liquid. (High thickness emulsion)
Color:	White or slightly beige, pigmented versions available.
Odor:	Odorless.
Odor Threshold:	Not applicable.
pH:	Not known.
Freezing Point:	32°F
Initial boiling point and boiling range:	Not applicable.
Flash point:	Not applicable.
Evaporation Rate:	Not known.
Flammability (solid, gas):	Non-flammable.
Upper/lower flammability or explosive limits:	Not applicable.
Lower / Upper Flammability and Explosive Limits:	Not applicable
Vapor pressure:	45 - 90 kPa at 122 °F
Vapor density:	3 - 4 Vapour Density (Air=1)
Density:	Not known.
Relative density:	1 - 1.25 Density (water=1)
Solubility(ies):	Solubility (Water) : Insoluble.
Partition coefficient: n-octanol/water:	Solubility (Other) : Not known.
Auto-ignition temperature:	Not known.
Decomposition Temperature (°F):	Not known.
Oxidizing properties:	Not known.
Other Information:	None.

10. STABILITY AND REACTIVITY

Reactivity:	Reacts at ambient temperatures and above 212 °F
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	No hazardous reaction known if used for ins intended purpose.
Conditions to Avoid:	Keep away from heat and direct sunlight.
Incompatible Materials:	Not known.
Hazardous Decompositions Products:	No hazardous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity - Ingestion:	Not classified.
Acute toxicity - Skin Contact:	Not classified.
Acute toxicity - Inhalation:	Not classified.
Skin corrosion/irritation:	Not classified./Causes mild skin irritation.
Serious eye damage/irritation:	Not classified. Irritation to eyes: Irritant by mechanical action.
Skin sensitization data:	Not classified.
Respiratory sensitization data:	Not classified.
Germ cell mutagenicity:	Not classified. No evidence of mutagenic effects.
Carcinogenicity:	Not classified. No evidence of carcinogenic effects.
Reproductive toxicity:	Self classification: No evidence of reproductive effects.
Lactation:	Not classified.
STOT - single exposure:	Not classified.
STOT - repeated exposure:	Not classified.
Aspiration hazard:	Not classified.
Other Information:	Not known.

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity - Aquatic invertebrates:	Low toxicity to invertebrates.
Toxicity - Fish:	Low toxicity to fish.
Toxicity - Algae:	Low toxicity to algae.
Toxicity - Sediment Compartment:	Not classified.
Toxicity - Terrestrial Compartment:	Not classified.
Persistence and degradability:	Not known.
Bioaccumulative potential:	Not known.
Mobility in soil:	Not known.
Other adverse effects:	Not known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:	Dispose at suitable refuse site. Dispose of contents in accordance with local, state and national legislation.
Additional Information:	No special precautions are required for this product.

14. TRANSPORT INFORMATION

UN Number:	Not applicable.
UN proper shipping name:	Not applicable.
Transport hazard class(es):	Not applicable.
Packing group:	Not applicable
Environmental hazards:	Not classified as a Marine Pollutant.
Special precautions for user:	Not known.
Transport in bulk according to Annex II of Marpol and the IBC Code:	Not known.

15. REGULATORY INFORMATION

US Federal Regulations

Toxic and hazardous substances (29 CFR 1910; Subpart Z):	Listed : 112926-00-8, 1344-28-1
National emission standards for hazardous air pollutants (40 CFR 61.01):	Not listed
SARA Title III Section 313:	Not listed
TSCA (Toxic Substance Control Act):	Listed : 7631-86-9 (Active), 7732-18-5 (Active), 1344-28-1 (Active), 65997-17-3 (Active)
CAA 602 - Ozone Depleting Substances (ODS):	Not listed

US State Regulations

State Right to Know Lists

Proposition 65 (California) :	Listed : 7631-86-9, 65997-17-3
Minnesota:	Listed : 7631-86-9, 112926-00-8, 1344-28-1, 65997-17-3
New Jersey:	Listed : 112926-00-8, 1344-28-1
Pennsylvania:	Listed : 7631-86-9, 112926-00-8, 1344-28-1, 65997-17-3
Rhode Island:	Listed : 1344-28-1, 65997-17-3

Other

OSPAR List of Chemicals for Priority Action:	Not listed
OSHA (List of Highly Hazardous Chemicals, Toxics and Reactives):	Not listed
NTP (National Toxicology Program):	Listed : 7631-86-9, 65997-17-3
IARC (International Agency for Research on Cancer):	Listed : 7631-86-9, 65997-17-3

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

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s):	None.
Precautionary Statement(s):	None.
Acronyms:	ATE: Acute Toxicity Estimate CAS: Chemical Abstracts Service LTEL: Long term exposure limit STEL: Short term exposure limit STOT: Specific Target Organ Toxicity
Key literature references and sources for data used to compile the SDS:	US CFR 1910.1200
Disclaimers:	Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Gives no warranty as to the fitness f the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. freedom under Patents, Copyright and Designs cannot be assumed.