

## 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.<br>21401 Park Row Drive #360<br>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 the 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.

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## 4. FIRST-AID MEASURES

### Description of first aid measures

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

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## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

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

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## 6. ACCIDENTAL RELEASE MEASURES

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

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## 7. HANDLING AND STORAGE

|  |  |
|--|--|
| <b>Precautions for safe handling:</b>                                | Keep container closed when not in use. Avoid contact with skin and eyes.   |
| <b>Conditions for safe storage, including any incompatibilities:</b> | 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. |
| <b>Storage temperature:</b>  | Ambient.   |
| <b>Storage life:</b>   | Stable under normal conditions.  |
| <b>Incompatible materials:</b>                                       | None known.  |
| <b>Specific end uses:</b>  | Not known.   |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Occupational Exposure Limits

| SUBSTANCE   | CAS No.     | LTEL<br>(8 hr TWA ppm) | LTEL<br>(8 hr TWA mg/m3) | STEL<br>(ppm) | STEL<br>(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_<br>Table Z-3, (3a),<br>(3e) |
| Silica, amorphous, precipitated and gel                               | 112926-00-8 |                        |                          |               |                 | OSHA PEL Z-1,<br>(n1)                 |
| Aluminum, metal and insoluble compounds                               | 1344-28-1   |                        | 1                        |               |                 | ACGIH TLV, R,<br>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,<br>A4                   |
| Synthetic vitreous fibers, continuous filament glass fibers           | 65997-17-3  | 1                      |                          |               |                 | ACGIH TLV, f/<br>cc (a), F, A4        |
| Synthetic vitreous fibers, rock wool fibers                           | 65997-17-3  | 1                      |                          |               |                 | ACGIH TLV, f/<br>cc (a), F, A3        |
| Mineral wool fiber  | 65997-17-3  |                        | 5                        |               |                 | NIOSH REL Z-1,<br>(p)                 |
| Synthetic vitreous fibers, continuous filament glass fibers           | 65997-17-3  |                        | 5                        |               |                 | NIOSH REL Z-1,<br>(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 cubic 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 SiO <sub>2</sub> + 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 / %SiO <sub>2</sub>  |
| 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 ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (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

|   |  |
|---|--|
| <b>Appearance:</b>                                      | Liquid. (High thickness emulsion)                      |
| <b>Color:</b>   | White or slightly beige, pigmented versions available. |
| <b>Odor:</b>  | Odorless.  |
| <b>Odor Threshold:</b>                                  | Not applicable.  |
| <b>pH:</b>  | Not known.   |
| <b>Freezing Point:</b>                                  | 32°F   |
| <b>Initial boiling point and boiling range:</b>         | Not applicable.  |
| <b>Flash point:</b>                                     | Not applicable.  |
| <b>Evaporation Rate:</b>                                | Not known.   |
| <b>Flammability (solid, gas):</b>                       | Non-flammable.   |
| <b>Upper/lower flammability or explosive limits:</b>    | Not applicable.  |
| <b>Lower / Upper Flammability and Explosive Limits:</b> | Not applicable   |
| <b>Vapor pressure:</b>                                  | 45 - 90 kPa at 122 °F                                  |
| <b>Vapor density:</b>                                   | 3 - 4 Vapour Density (Air=1)                           |
| <b>Density:</b>   | Not known.   |
| <b>Relative density:</b>                                | 1 - 1.25 Density (water=1)                             |
| <b>Solubility(ies):</b>                                 | Solubility (Water) : Insoluble.                        |
| <b>Partition coefficient: n-octanol/water:</b>          | Solubility (Other) : Not known.                        |
| <b>Auto-ignition temperature:</b>                       | Not known.   |
| <b>Decomposition Temperature (°F):</b>                  | Not known.   |
| <b>Viscosity:</b>                                       | > 2640 °F  |
| <b>Explosive properties:</b>                            | < 7 cSt at 40 °C                                       |
| <b>Oxidizing properties:</b>                            | Not known.   |
| <b>Other Information:</b>                               | None.  |

## 10. STABILITY AND REACTIVITY

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

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## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

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

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## 12. ECOLOGICAL INFORMATION

### Toxicity

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

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## 13. DISPOSAL CONSIDERATIONS

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

## 14. TRANSPORT INFORMATION

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

## 15. REGULATORY INFORMATION

### US Federal Regulations

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

### US State Regulations

#### State Right to Know Lists

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

#### Other

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

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