

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name:</b>	<b>Rain Safe Leak Repair</b>
<b>Product Use Description:</b>	Innovative waterproofing coating specifically engineered to be applied to wet or damp roofs, even underwater, with effective curing
<b>Manufacturer:</b>	NanoTech Materials, Inc. 21401 Park Row Drive #360 Katy, TX 77449
<b>Email:</b>	info@nanotechmaterials.com
<b>Telephone:</b>	1-(888) 296-6266

## 2. HAZARDS IDENTIFICATION

### GHS Classification

<b>Inhalation:</b>	High vapor concentrations are irritating to the respiratory tract
<b>Serious eye damage:</b>	May cause eye irritation
<b>Skin sensitizations:</b>	Slightly irritating
<b>Ingestion:</b>	Do not ingest. Aspiration during ingestion or vomiting may cause pulmonary injury.

### GHS Label Elements

#### Hazard Pictograms:



<b>Signal Word:</b>	Warning
<b>Hazard Statements:</b>	Flammable liquid and vapor. May be harmful if swallowed and enters airways. Causes mild skin irritation. Causes eye irritation. May be harmful if inhaled.

## Precautionary Statements

<b>Prevention:</b>	<p><b>Do Not</b> handle until all safety precautions have been read and understood.</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>Keep container tightly closed.</p> <p>Avoid breathing mist, vapors or spray.</p> <p><b>Do Not</b> get in eyes, on skin, or on clothing.</p> <p>Wash thoroughly after handling.</p> <p><b>Do Not</b> eat, drink, or smoke when using this product.</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Use explosion-proof electrical/ventilating/light/equipment.</p> <p>Take precautionary measures against static discharge.</p>
<b>Response:</b>	<p><b>Skin:</b> Wash with plenty of water.</p> <p><b>Eyes:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing.</p> <p><b>Inhalation:</b> Remove person to fresh air and keep comfortable for breathing.</p> <p><b>Ingestion:</b> Rinse mouth. Do not induce vomiting</p>
<b>Storage:</b>	<p>Store in a well-ventilated place. Keep container tightly closed.</p> <p>Store at temperatures between 40°F and 90°F.</p>
<b>Disposal:</b>	<p>Waste disposal should be in accordance with existing federal, state and local environmental control laws.</p> <p>Incineration is the preferred method.</p>

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Mixture of

<b>Methoxy Propanol Acetate:</b>	15 wt%
<b>Thermoplastic Polymer:</b>	24 wt%
<b>Polybutene:</b>	9 wt%
<b>Acrylic Resin:</b>	10 wt%
<b>Titanium Dioxide:</b>	3 wt%
<b>Talc:</b>	7 wt%
<b>Magnesite:</b>	5 wt%
<b>Aluminum Silicate:</b>	4 wt%
<b>Para-aramid:</b>	1 wt%
<b>Mineral Spirits:</b>	12 wt%
<b>Dimethyl Carbonate:</b>	10 wt%

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## 4. FIRST-AID MEASURES

<b>Skin Contact:</b>	Get medical attention. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing/shoes.
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<b>Eye Contact:</b>	Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.
<b>Inhalation:</b>	Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.
<b>Ingestion:</b>	Do Not induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.
<b>Most important symptoms/effects, acute and delayed:</b>	Symptoms: See section 11
<b>Indication of immediate medical attention and special treatment needed:</b>	Treatment: Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

<b>General Fire Hazards:</b>	No unusual fire or explosion hazards noted.
<b>Suitable (and unsuitable) extinguishing:</b>	<b>Small fire:</b> Use dry chemicals, CO <sup>2</sup> , water spray or alcohol-resistant foam. <b>Large fire:</b> Use water spray, water fog or alcohol-resistant foam. Cool all affected containers with flooding quantities of water.
<b>Specific hazards arising from the chemical:</b>	Carbon oxides expected to be the primary hazardous combustion product.
<b>Special protective equipment for fire-fighters:</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.
<b>Hazardous Combustion Products:</b>	Carbon dioxide, carbon monoxide, smoke, fumes, and unburned hydrocarbons.
<b>Flammable Properties Classification:</b>	OSHA/NFPA Class II Combustible Liquid.
<b>Flash point:</b>	42 °C (108 °F) - closed cup
<b>Auto ignition temperature:</b>	471 °C (880 °F)

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>	Do Not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
<b>Methods and material for containment and cleaning up:</b>	Absorb with an inert dry material and place in an appropriate waste disposal container. Keep disposal containers closed when finished.
<b>Environmental Precautions:</b>	Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

## 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling:</b>	<p>Do not get on skin or in eyes.</p> <p>Do not inhale vapor or mist.</p> <p>Keep away from sources of ignition - No smoking.</p> <p>Take measures to prevent the buildup of electrostatic charge.</p> <p>Open and handle container with care.</p> <p>Metal containers involved in the transfer of this material should be grounded and bonded.</p>
<b>Recommendations on the conditions for safe storage:</b>	<p>Store in a tightly closed container and keep in a cool, dry, well-ventilated place.</p> <p>Keep container away from extreme heat and strong oxidizing agents.</p>

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control Parameters

#### Exposure limits

CHEMICAL NAME	PEL	TLV
Titanium Dioxide (dust)	15mg/m <sup>3</sup> (8 hr. TWA)	10mg/m <sup>3</sup> (8 hr. TWA)
Crystalline Silica (present <0.001%)	0.05mg/m <sup>3</sup> (dust)	0.1mg/m <sup>3</sup> (dust)
Mineral Spirits	525 mg/m <sup>3</sup> (TWA)	100 ppm (TWA)
Methoxy Propanol Acetate	N/A	100 ppm (TWA)
Dimethyl Carbonate	N/A	100 ppm (TWA)

<b>Appropriate Engineering Controls:</b>	<p>Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below).</p> <p>An eye wash station and safety shower should be located near the workstation.</p>
<b>Individual protection measures:</b>	<p>Personal protective equipment should be selected based upon the conditions under which this material is used.</p> <p>A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA</p>
<b>Inhalation protection:</b>	<p>The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation.</p> <p>If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.</p> <p>Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).</p>
<b>Eye protection:</b>	<p>Safety glasses equipped with side shields are recommended as minimum protection in industrial settings.</p> <p>Wear goggles if splashing or spraying is anticipated.</p> <p>Have suitable eye wash water available.</p>

<b>Skin and body protections:</b>	<p>None required for incidental contact.</p> <p>Use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected.</p> <p>Use clean protective clothing if splashing or spraying conditions are present.</p> <p>Protective clothing may include long-sleeved outer garment, apron, or lab coat.</p> <p>If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower.</p> <p>Launder contaminated clothing before reuse or discard.</p>
<b>Other hygienic practices and protective equipment:</b>	<p>Use good personal hygiene practices.</p> <p>Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work.</p> <p><b>Do Not</b> use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.</p>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Fibrous Thixotropic Paste
<b>Physical state:</b>	Liquid
<b>Color:</b>	Cement Gray
<b>Odor:</b>	Mildly aromatic hydrocarbon odor
<b>Odor threshold:</b>	0.07 ppm
<b>pH:</b>	None established.
<b>Freezing point/melting point:</b>	-60 °C
<b>Initial boiling point and boiling range:</b>	149°C to 182°C
<b>Flash point:</b>	108°F (42°C)
<b>Evaporation rate:</b>	0.2 (butyl acetate = 1)
<b>Flammability (solid, gas):</b>	Flammable
<b>Upper/lower limit on flammability or explosive limits:</b>	(by volume) 5.7% / 0.8%
<b>Vapor pressure:</b>	0.8kPa (6mmHg) @20 °C (68°F)
<b>Vapor density:</b>	4 (air = 1)
<b>Relative density:</b>	1.03kg/lit
<b>Solubility(ies):</b>	Insoluble
<b>Partition coefficient (n-octanol/water):</b>	None established
<b>Auto-ignition temperature:</b>	471°C (880°F)
<b>Decomposition temperature:</b>	None established
<b>Viscosity:</b>	75,000 centipoises @20°C

## 10. STABILITY AND REACTIVITY

<b>Hazardous polymerization:</b>	Not expected to occur.
<b>Chemical stability:</b>	Stable.

<b>Incompatibility:</b>	Strong oxidizers.
<b>Hazardous decomposition products:</b>	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.
<b>Conditions to avoid:</b>	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.

## 11. TOXICOLOGICAL INFORMATION

The following information regarding health hazards is based upon third-party research studies.

### Effects of Acute Exposure

<b>Inhalation:</b>	Inhalation of dust or mist can cause irritation of the eyes, nose, throat, and lungs.
<b>Ingestion:</b>	Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury.
<b>Skin Contact:</b>	This material can cause irritation if not promptly washed from the skin. This product is not expected to be absorbed through intact skin.
<b>Eye Contact:</b>	Like any foreign body, particles can cause mechanical irritation.

### Effects of Chronic Exposure

<b>Titanium Dioxide:</b>	<p>In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have been shown to cause an increase in lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. The potential for these adverse health effects appears to be closely related to the particle size and the amount of the exposed surface area that comes into contact with the lung. However, tests with other laboratory animals, such as mice and hamsters, indicate that rats are significantly more susceptible to the pulmonary overload and inflammation that causes lung cancer.</p> <p>Epidemiology studies do not suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide.</p> <p>Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion).</p> <p>It has not been characterized as a potential carcinogen by either NTP or OSHA.</p>
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### Exposure limits

CHEMICAL NAME	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation
Titanium Dioxide	10,000 mg/kg	10,000 mg/kg	6.8 mg/ltr (4 h)
Methoxy Propanol Acetate	8,500 mg/kg	5,000 mg/kg	N/A
Mineral Spirits	>5,000 mg/kg	>3,000 mg/kg	N/A
Para-aramid	7,500 mg/kg	No Irritation (Human)	N/A

## 12. ECOLOGICAL INFORMATION

Data from toxicity test (aquatic and/or terrestrial organism where available)

CHEMICAL NAME	Algae/Aquatic Plants (EC50)	Fish (LC50)	Toxicity to Microorganism	Crustacea (Aquatic Invertebrates)
Titanium Dioxide	16 mg/ltr 72 hr. (Pseudokirchneriella subcapitata)	>1000 mg/ltr 96 hr. (Pimephales promelas (fathead minnow))	NOEC 28 d ≥100,000 mg/kg (Hyalella azteca)	LC50 100mg/ltr 48 hr. (daphnia magna)

Mineral Spirits	1.2 mg/lit 72 hr. (Pseudokirchneriella subcapitata - green algae)	N/A	N/A	0.1 mg/lit 21 d (Daphnia magna - Water flea)
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**Ecotoxicity:** Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

**Environmental Fate**

- Biodegradability:** Inherently biodegradable in aerobic conditions.
- Partition Coefficient (log Kow):** >6 (based on similar materials)
- Photodegradation:** Based on similar materials, this product will have little or no tendency to partition to air. Hydrocarbons from this product which do partition to air are expected to rapidly photodegrade.
- Stability in Water:** Not readily susceptible to hydrolysis under aquatic conditions.
- Distribution:** Principally to soil and sediment. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

### 13. DISPOSAL CONSIDERATIONS

- Waste Disposal Methods:** Waste disposal should be in accordance with existing federal, state and local environmental control laws. Incineration is the preferred method.
- Empty Container Precautions:** Empty containers retain product residue; observe all precautions for product. Do not heat or cut empty containers with electric or gas torch because highly toxic vapors and gases are formed. **Do not** reuse without thorough commercial cleaning and reconditioning. If container is to be disposed, ensure all product residues are removed prior to disposal.

### 14. TRANSPORT INFORMATION

- UN #:** 1263
- UN PROPER SHIPPING NAME:** Paint
- HAZARD CLASS:** 3
- PACKING GROUP:** III
- ENVIRONMENTAL HAZARDS:** Not a marine pollutant
- GUIDANCE ON TRANSPORT IN BULK:** N/A
- Transport labels required:** Flammable liquid (In the U.S., this material may be re-classified as a combustible liquid and is not regulated in containers less than 119 gallons via surface transportation.)

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

#### SARA 311/312 Hazard Categories

CHEMICAL NAME	CWA Reportable Quantities	CWA Toxic Pollutants	CWA Priority Pollutants	CWA Hazardous Substances	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity RQ
Xylene (<0.0001%)	N/A	Listed	N/A	Chronic Health Hazard	Acute	N/a	N/A

**US State Right to Know Regulations:** New Jersey, Massachusetts, Pennsylvania, Rhode Island

CHEMICAL NAME	CAS #
Titanium Dioxide	13463-67-7

#### CA Prop 65

CHEMICAL NAME	CAS #	
Titanium Dioxide	13463-67-7	Although present, is bound within the matrix of the product and is not considered to be within the hazard criteria.

#### Canada

CHEMICAL NAME	CAS #
Titanium Dioxide	13463-67-7

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

**Health:** 1

**Flammability:** 2

**Physical Hazard:** 0

**Personal Protection:** G

#### Disclaimer:

NanoTech Materials, Inc ("NanoTech") believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the issue date of this Safety Data Sheet (SDS). However, because the conditions of handling, use, and storage of these materials are beyond NanoTech's control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations contained in the SDS are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state and local laws and regulations.