

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Sub Slope Silicone
Product Use Description:	Mastic coating, protection of construction materials
Manufacturer:	NanoTech Materials, Inc. 21401 Park Row Drive #360 Katy, TX 77449
Email:	info@nanotechmaterials.com
Telephone:	1-(888) 296-6266

2. HAZARDS IDENTIFICATION

GHS Label Elements

Hazard Pictograms:



Signal Word: Danger.

Hazard Statements: May cause cancer. Suspected of damaging fertility or the unborn child.

Hazard Classification

Flammable Liquids: Category 0

Carcinogenicity: Category 1A

Toxic to Reproduction: Category 2

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Substance(s) formed under the conditions of use: Generates methanol during cure.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS number	Content in percent (%) *	Notes
(1) Calcium Carbonate	471-34-1	20 - <50%	# This substance has workplace exposure limit(s).
Titanium, Bis(ethyl acetoacetato)-diisopropoxy	27858-32-8	1 - <5%	No data available.
Octadecanoic acid	57-11-4	1 - <5%	# This substance has workplace exposure limit(s).
(1) QUARTZ	14808-60-7	0.1 - <1%	# This substance has workplace exposure limit(s).
Octamethylcyclotetrasiloxane	556-67-2	0.1 - <1%	No data available.

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. FIRST-AID MEASURES

General information:	No action shall be taken involving any personal risk or without suitable training.
Ingestion:	If swallowed, do NOT induce vomiting. Give a glass of water.
Inhalation:	If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.
Skin Contact:	Wash contaminated clothing before reuse. In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.
Eye contact:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Most important symptoms/effects, acute and delayed	
Symptoms:	No data available.
Hazards:	No data available.
Indication of immediate medical attention and special treatment needed	
Treatment:	Treatment is symptomatic and supportive. This product reacts with moisture in the acid contents of the stomach to form methanol.

5. FIRE-FIGHTING MEASURES

General Fire Hazards:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use standard firefighting procedures and consider the hazards of other involved materials.
Suitable (and unsuitable) extinguishing	
Suitable extinguishing media:	Water spray, carbon dioxide, foam.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical:

In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

Special protective equipment and precautions for firefighters

Special fire-fighting procedures:

When using do not smoke. Do not empty into drains.

Special protective equipment for firefighters:

Wear full protective fire gear including self-containing breathing apparatus operated in the positive pressure mode with full face piece, coat, pants, gloves and boots.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Product releases methanol during application and curing. Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Avoid inhalation of vapors and spray mists. Keep container closed. Keep out of reach of children. See Section 8 of the SDS for Personal Protective Equipment.

Methods and material for containment and cleaning up:

Wear proper protective equipment as specified in the protective equipment section. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal. Warn other workers of spill. Keep unauthorized personnel away.

Notification Procedures:

Caution: Contaminated surfaces may be slippery. See Section 8 of the SDS for Personal Protective Equipment.

Environmental Precautions:

Do not allow runoff to sewer, waterway or ground.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Conditions for Safe Storage, including any incompatibilities:

Keep container tightly closed. Recommended storage in original container below 30°C (85°F).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
(1) Calcium Carbonate - Total	REL	10 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
(1) Calcium Carbonate - Respirable.	REL	5 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
(1) Calcium Carbonate - Total dust.	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
(1) Calcium Carbonate - Respirable fraction.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
(1) Calcium Carbonate - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
(1) Calcium Carbonate - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Octadecanoic acid	TWA	10 mg/m ³	US. ACGIH Threshold Limit Values (03 2015)
(1) QUARTZ - Respirable fraction.	TWA	0.025 mg/m ³	US. ACGIH Threshold Limit Values (03 2015)
(1) QUARTZ - Respirable dust.	REL	0.05 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	0.1 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
(1) QUARTZ - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.1 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
(1) QUARTZ	PEL	0.05 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
Octamethylcyclotetrasiloxane	TWA	5 ppm	

Appropriate Engineering Controls: Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information: Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

Eye/face protection: Monogoggles

Skin Protection

Hand Protection: Chemical resistant gloves

Other: Wear rubber apron. Wear suitable protective clothing and eye/face protection.

Respiratory Protection: If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: liquid
Form: liquid
Color: Various
Odor: Alcohol
Odor threshold: No data available.
pH: not applicable
Melting point/freezing point: not applicable
Initial boiling point and boiling range: No data available.
Flash Point: Not Applicable

Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Heat of combustion:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	No data available.
Relative density:	1.30
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
VOC:	24 g/l

10. STABILITY AND REACTIVITY

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of Hazardous Reactions:	Hazardous polymerisation does not occur
Conditions to Avoid:	None known.
Incompatible Materials:	None known.
Hazardous Decompositions Products:	Carbon oxides Oxides of silicon. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.

Information on toxicological effects

Oral

Product: Not classified for acute toxicity based on available data.
 Specified substance(s)
 Octadecanoic acid: LD 50 (Rat, No data available.): > 2,000 mg/kg
 Octamethylcyclotetrasiloxane: LD 50 (Rat): 4,800 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.
 Specified substance(s):
 Octamethylcyclotetrasiloxane: LD 50 (Rat): > 2,400 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.
 Specified substance(s)
 Octamethylcyclotetrasiloxane: LC50 (Rat): 36 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

(1) QUARTZ: Overall evaluation: 1. Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

(1) QUARTZ: Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available

Specified substance(s)

Octamethylcyclotetrasiloxane: Ames-Test (OECD-Guideline 471): negative (not mutagenic); Mouse Lymphoma Assay (OECD Guideline 476): negative (not mutagenic)

In vivo

Product: No data available

Specified substance(s)

Octamethylcyclotetrasiloxane: Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Inhalation (Rat, male and female): negative

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. ECOLOGICAL INFORMATION

Fish

Product: No data available.

Specified substance(s)

Octadecanoic acid: LC0 (Brachydanio rerio, 96 h): > 100 mg/l LC0 (Leuciscus idus, 96 h): > 100 mg/l

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment

Fish

Product: No data available.

Specified substance(s)

Octadecanoic acid: LC0 (Brachydanio rerio, 4 d): > 100 mg/l LC0 (Leuciscus idus, 4 d): > 100 mg/l

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane: 3.7 % (29 d, 310 Ready Biodegradability - CO₂ in Sealed Vessels (Headspace Test))
 Not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s)

Octamethylcyclotetrasiloxane: Fathead Minnow, Bioconcentration Factor (BCF): 12.40

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

(1) Calcium Carbonate: No data available.

Titanium, Bis(ethyl acetoacetato)-diispropoxy: No data available.

Octadecanoic acid: No data available.

(1) QUARTZ: No data available.

Octamethylcyclotetrasiloxane: No data available.

Other adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

General information: The generation of waste should be avoided or minimized wherever possible. Do not discharge into drains, water courses or onto the ground. See Section 8 for information on appropriate personal protective equipment.

Disposal instructions: Disposal should be made in accordance with federal, state and local regulations.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT

UN Number: None

UN Proper Shipping Name: None

Class: None

Label(s): NONE

Packing Group: None

Marine Pollutant: No

IMDG: Not regulated.

IATA: Not regulated.

15. REGULATORY INFORMATION

U.S. Federal Regulations

- TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

- None present or none present in regulated quantities.
- **CERCLA Hazardous Substance List (40 CFR 302.4)**
None present or none present in regulated quantities.
- **Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories**
Delayed (Chronic) Health Hazard
- **SARA 302 Extremely Hazardous Substance**
None present or none present in regulated quantities.
- **SARA 304 Emergency Release Notification**
None present or none present in regulated quantities.
- **SARA 311/312 Hazardous Chemical**

Chemical Identity	Threshold Planning Quantity
(1) Calcium Carbonate	10000 lbs
Titanium, Bis(ethyl acetoacetato)-diisoproxy	10000 lbs
Octadecanoic acid	10000 lbs
(1) QUARTZ	10000 lbs
Octamethylcyclotetrasiloxane	10000 lbs

- **SARA 313 (TRI Reporting)**
None present or none present in regulated quantities.
- **Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**
None present or none present in regulated quantities.
- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
None present or none present in regulated quantities.

US State Regulations

- **US. California Proposition 65**
This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

(1) TITANIUM DIOXIDE	Carcinogenic.
(1) QUARTZ	Carcinogenic.
Methanol	<ul style="list-style-type: none"> • Maximum Allowable Dose Level (MADL): 47000 µg/day. • Developmental toxin.

- **US. New Jersey Worker and Community Right-to-Know Act**
Chemical Identity: Siloxanes and Silicones, di-Me hydroxy terminated; (1) Calcium Carbonate; Decamethylcyclopentasiloxane; Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, reaction products with ammonia, octamethylcyclotetrasiloxane and silica; Methyltrimethoxysilane; (1) TITANIUM DIOXIDE; (1) QUARTZ; Octamethylcyclotetrasiloxane
- **US. Massachusetts RTK - Substance List**
Chemical Identity: (1) Calcium Carbonate; (1) QUARTZ
- **US. Pennsylvania RTK - Hazardous Substances**
Chemical Identity: (1) Calcium Carbonate
- **US. Rhode Island RTK**
No ingredient regulated by RI Right-to-Know Law present.

Inventory Status

Australia AICS	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List	Not in compliance with the inventory.	Remarks: None.
EINECS, ELINCS or NLP	On or in compliance with the inventory	Remarks: None.
Japan (ENCS) List	Not in compliance with the inventory.	Remarks: None.
China Inv. Existing Chemical Substances	Not in compliance with the inventory.	Remarks: None.
Korea Existing Chemicals Inv. (KECI)	Not in compliance with the inventory.	Remarks: None.

Canada NDSL Inventory	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS	Not in compliance with the inventory.	Remarks: None.
US TSCA Inventory	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals	Not in compliance with the inventory.	Remarks: None.
Taiwan Chemical Substance Inventory	Not in compliance with the inventory.	Remarks: None.

16. OTHER INFORMATION

HMIS Hazard ID

Health	1
Flammability	1
Physical Hazards	0

Hazard rating:

0 – Minimal

1 – Slight

2 – Moderate

3 – Serious

4 – Severe *Chronic health effect

Further Information:

No data available.

