



**POUR IN THE STRENGTH**

## SAFETY DATA SHEET



### 1. Product and Company Identification

Product Name: **EdenCrete®**

Product/Material Uses: Nanotube-engineered concrete admixture

Supplier: **Eden Innovations LLC**  
12395 Mead Way,  
Littleton, CO 80125

Telephone: 303-468-1705

Emergency Phone: In the event of a leak, fire or medical emergency call INFOTRAC toll free 1-800-535-5053. Outside the USA and Canada call +1-352-323-3500

### 2. Hazards Identification

Two components of this product, carbon nanotubes and amorphous silica (see Section 3), do not present a respiratory hazard in the liquid product unless the product is sprayed or otherwise becomes airborne in a manner that employees could inhale it. **EdenCrete®** does not present a respiratory hazard when used in accordance with Manufacturer's instructions.

#### Hazard Classifications

Skin Sensitization: Category 1  
 Skin Corrosion/Irritation: Category 3  
 Specific Target Organ Toxicity, Single Exposure: Category 3 [respiratory irritant]

#### Signal Word

WARNING

#### GHS Label Elements, including precautionary statements



#### HAZARD STATEMENTS

H317 May cause an allergic skin reaction.  
 H316 Causes mild skin irritation.  
 H335 May cause respiratory irritation.

#### PRECAUTIONARY STATEMENTS

P261 Avoid breathing dust, mist, vapor or spray.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear eye protection/face protection.  
 P302+P352 If on Skin: wash with plenty of soap and water.  
 P304+P340 If Inhaled: remove person to fresh air and keep comfortable for breathing.  
 P312 Call a Poison Center or Doctor if you feel unwell.  
 P321 See first aid treatment provided on the product label.  
 P362+P364 Take off contaminated clothing and wash it before use.  
 P332+P313 If skin irritation occurs: Get medical attention/advice.  
 P333+P313 If skin irritation or rash occurs: Get medical attention/advice.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up  
 P501 Dispose of contents/container in accordance with local, state, federal and international regulation.

### 3. Composition/Information on Ingredients

Ingredient Name	CAS Number	Percent of Total Weight
Carbon Nanotubes	308068-56-6	<5
Amorphous Silica	7631-86-9	<5
Trade Secret Component #1	Not Given	<5
Trade Secret Component #2	Not Given	<5

Two components of this product, carbon nanotubes and amorphous silica, do not present a respiratory hazard in the liquid product unless the product is sprayed or otherwise becomes airborne in a manner that workers could inhale. EdenCrete® does not present a respiratory hazard when used in accordance with manufacturer instructions.

### 4. First-Aid Measures

#### Eye:

In case of eye contact, immediately rinse eyes thoroughly with plenty of water for at least 15 minutes. Hold eyelids apart to assist in flushing. Get immediate medical attention.

#### Skin:

Remove contaminated clothing and shoes. IF ON SKIN: Wash with plenty of soap and water. Get medical attention immediately if irritation (e.g., redness, rash) develops and persists.

#### Ingestion:

IF SWALLOWED: Immediately call a Poison Center or doctor/physician. If victim is fully conscious, give one or two cups of water or milk to drink. If vomiting occurs naturally, have person rinse their mouth out with water. Never give anything by mouth to an unconscious person.

#### Inhalation:

Remove person from source of exposure to fresh air. Get medical attention if irritation or other symptoms develop. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

#### Note to Physician:

See Section 11 for Toxicology Information.

### 5. Fire-fighting Measures

#### Fire And Explosion Hazards:

Fire or excessive heat may rupture containers. Thermal oxidation or burning may produce oxides of carbon, sulfur, sodium and silicon as decomposition products.

#### Extinguishing Media:

Use water spray, alcohol-foam, dry chemical or carbon dioxide. Use water in large amounts to cool fire-exposed containers.

#### Fire Fighting Instructions:

Evacuate area and keep people away. Firefighters should wear self-contained breathing apparatus and full protective gear.

### 6. Accidental Release Measures

Evacuate personnel from area until cleanup is complete. Cleanup personnel should use appropriate personal protective equipment (PPE) including respiratory protection for spill cleanup. Avoid breathing vapors, mist or gas. Provide maximum dilution or local exhaust ventilation to spill area. Do not let product enter floor drains or discharges. Prevent discharge to the environment.

For large spills: Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Pick up released product with appropriate implements. Do not generate dust or aerosols. Keep disposal containers tightly closed.

### 7. Handling and Storage

#### Handling Precautions:

Avoid creating and breathing dust, spray or mist. Do not apply the product by spraying or misting. Avoid contact with eyes and skin. Wear appropriate personal protective equipment. Use with adequate local exhaust ventilation based on the scale of the work. Store away from incompatible materials.

#### Storage Precautions:

Keep away from heat, spark, open flames or other sources of ignition. Keep container tightly closed. Store in a cool, dry, well-ventilated area out of direct sunlight between 5 to 50 °C [23 to 121 °F]. Store away from incompatible materials, such as strong oxidizing agents, halogens and acids.

#### Work/Hygienic Practices:

Use good personal hygiene. Wash thoroughly with soap and water after handling.

## 8. Exposure Controls/Personal Protection

### Engineering Controls:

Only use with adequate general and local exhaust ventilation. Avoid spraying or misting the material so it becomes airborne.

Protect from spillage and discharge to the environment. Do not let product enter drains or waterways.

### Eye/Face Protection:

Safety glasses with side shields or goggles are recommended as minimum industrial eye protection when handling bulk product or performing spill cleanup.

### Skin Protection:

Chemical protective gloves made of nitrile, neoprene or natural rubber are recommended to minimize skin contact. Use proper glove removal technique [without touching glove's outer surface] to avoid skin contact with this product.

### Respiratory Protection:

In case of inadequate ventilation, use a NIOSH-approved particulate respirator, such as a N95 or P100.

### Other/General Protection:

Do not let product enter drains. Any predictable or purposeful disposal or release into the waters of the United States is prohibited. Discharge into the environment should be avoided.

### Ingredient(s) - Exposure Limits

Component	Type	Exposure Limit
Carbon nanotubes*	NIOSH REL-TWA	1 µg/m <sup>3</sup> [as CNT]
	ACGIH TLV-TWA	3 mg/m <sup>3</sup> [as inhalable carbon black]
	OSHA PEL-TWA	3.5 mg/m <sup>3</sup> [as carbon black]
	NIOSH REL-TWA	3.5 mg/m <sup>3</sup> [as carbon black]
	ACGIH TLV-TWA	2 mg/m <sup>3</sup> [as synthetic graphite except fibers respirable fraction]
	OSHA PEL-TWA	5 mg/m <sup>3</sup> [as synthetic graphite, respirable fraction]
	OSHA PEL-TWA	15 mg/m <sup>3</sup> [as synthetic graphite, total dust]
Amorphous Silica*	OSHA PEL-TWA	20 mppcf [or 80 mg/m <sup>3</sup> /%SiO <sub>2</sub> ]
	NIOSH REL-TWA	6 mg/m <sup>3</sup> [10 hr]
	IDLH	3000 mg/m <sup>3</sup>
	Cal OSHA PEL-TWA	6 mg/m <sup>3</sup> , total dust
	Cal OSHA PEL-TWA	3 mg/m <sup>3</sup> , respirable dust
	DOE TEEL-0	6 mg/m <sup>3</sup>
	DOE TEEL-1	18 mg/m <sup>3</sup>
DOE TEEL-2	100 mg/m <sup>3</sup>	

\*EdenCrete® does not present a respiratory hazard when used in accordance with Manufacturer's instructions.

## 9. Physical and Chemical Properties

Properties	Notes
Appearance	A black, opaque liquid.
Odor	None - do not inhale
Odor Threshold	No data available
Chemical Type	Mixture
Physical State	Liquid
Melting Point	No data available
Boiling Point	No data available
Specific Gravity	1.022
Percent Volatiles	No data available
Percent VOCs	No data available
Packing Density	No data available
Vapor Pressure	No data available
Vapor Density	No data available
pH	5.15
Solubility	Soluble
Viscosity	2.9 cP
Evaporation Rate	No data available
Partition Coefficient [n-octanol/water]	No data available
Flash Point	No data available
Flammability [solid, gas]	Not applicable
Lower Explosive Limit [LEL %]	Not applicable
Upper Explosive Limit [UEL %]	Not applicable
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Electrical Resistivity	No data available

## 10. Stability and Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Conditions To Avoid [Stability]:**

Direct sunlight. Extremely high or low temperatures.

**Incompatible Materials:**

Incompatible with strong oxidizing agents (such as chlorine,

nitric acid, sulfuric acid, hydrogen peroxide, nitrates, perchlorates and permanganates), halogens and acids.

**Hazardous Decomposition Products:**

Thermal oxidation or burning may produce oxides of carbon, sulfur, sodium and silicon as decomposition products.

**Conditions To Avoid [Polymerization]:**

Hazardous polymerization will not occur.

## 11. Toxicological Information

Characteristics	Symptoms
Eye Effects	Eye contact may cause eye and mucous membrane irritation.
Skin Effects	Contact with skin and mucous membranes may cause skin irritation, rash and redness. Trace components of this product are considered to be skin sensitizers - avoid direct skin contact.

## Toxicological Information (continued)

Acute Oral Effects	May be harmful if swallowed. May cause mouth and gastrointestinal irritation and upset.		
Inhalation Effects	Inhalation may cause nose and throat irritation. May be harmful if inhaled. Inhalation of high dust or mist concentrations may cause lung damage.		
Chronic/Carcinogenicity	The International Agency for Research on Cancer (IARC) classifies the carbon nanotubes used in this product as Not Classifiable as to their carcinogenicity to humans (Group 3). No other ingredients are not classified by OSHA, NTP or ACGIH as to their carcinogenicity.		
Reproductive Effects	Reproductive effects have been observed in laboratory animals given intravenous infusions of carbon nanotubes during pregnancy - abortion, birth defects, low birth weight.		
Ingredient(s) - Toxicological Data	Amorphous Silica	LD50 (oral, rat)	>22,500 mg/kg
		LD50 (oral, mouse)	>15,000 mg/kg
		LD50 (oral, rat)	>5000 mg/kg

## 12. Ecological Information

### Ecotoxicological Information:

This product is not classified for Acute Aquatic Toxicity based on available information. There is insufficient information to estimate Chronic Aquatic Toxicity.

Do not allow product to enter the waterways of the United States. Carbon nanotubes are resistant to degradation. Studies suggest that carbon nanotubes can be very mobile in various porous sub-surface soil systems depending upon stabilization and soil characteristics.

## 13. Disposal Considerations

Dispose in accordance with applicable federal, state and local government regulations. Dispose of bulk amounts in an environmentally responsible manner. Dispose of unused product and any packaging used with the product. Do not dispose of this product into the waters of the United States.

This product is not considered a Hazardous Waste under RCRA, although the use of a licensed, professional disposal service is recommended.

## 14. Transport Information

### Proper Shipping Name

Not regulated for transportation

### Additional Shipping Paper Description

**IMDG** Not restricted.

**IATA** Not restricted.

## 15. Regulatory Information

### U.S. Regulatory Information

All ingredients of this product are listed or are excluded from listing under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

### SARA Hazard Classes

Acute Health Hazard  
Chronic Health Hazard

### SARA Section 313 Notification

This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

### Ingredient(s) - State Regulations

Carbon Nanotubes  
California - Proposition 65  
Amorphous Silica  
Pennsylvania - Workplace Hazard

## 16. Other Information

### Revision/Preparer Information

This SDS Supersedes A Previous (M)SDS Dated: 06/29/2016

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