

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Silicon Carbide Nanowires A100, Research Grade

Catalog Number: NovaWire-SiC-100-RD

Formula: SiC

Diameter: ~ 350 nm

Length: > 100 µm

Supplier: Novarials Corporation  
800 W Cummings Park, Suite 4600  
Woburn, MA 01801

Telephone: +1 617-276-5642

Fax: +1 781-995-0388

### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Not a hazardous substance or mixture.

#### NFPA Ratings

Health Hazard: 0

Fire Hazard: 0

Reactivity Hazard: 0

#### HMIS Ratings

Health Hazard: 0

Chronic Health Hazard: \*

Flammability: 0

Physical Hazard: 0

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Silicon carbide

Formula: SiC

Molecular weight: 40.1 g/mol

Component	Concentration
<b>Silicon carbide</b>	
CAS-No.	409-21-2
EC-No.	206-991-8

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#### 4. FIRST AID MEASURES

##### **General advice**

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

##### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

##### **In case of eye contact**

Rinse thoroughly with plenty of water and consult a physician.

##### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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#### 5. FIREFIGHTING MEASURES

##### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### **Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

##### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions – Carbon oxides, silicon oxides

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#### 6. ACCIDENTAL RELEASE MEASURES

##### **Personal precautions**

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust.

##### **Environmental precautions**

Do not let product enter drains.

##### **Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

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#### 7. HANDLING AND STORAGE

##### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

##### **Conditions for safe storage**

Keep container tightly closed in a cool, dry and well-ventilated place.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### **Personal protective equipment**

##### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level

protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye/Face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Control of environmental exposure**

Do not let product enter drains.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE**

Form powder  
Color light grey

**Safety data**

pH	no data available
Melting point/freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Auto ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

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**10. STABILITY AND REACTIVITY**

**Reactivity**

no data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Materials to avoid**

Strong oxidizing agents.

**Hazardous decomposition products**

Other decomposition products -no data available

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - Rat - female - > 2,000 mg/kg

Inhalation: No data available

Dermal: No data available

**Skin corrosion/irritation**

Skin - Rat

Result: No skin irritation

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

in vitro assay

S. typhimurium

Result: negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Specific target organ toxicity -single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity -repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Additional Information**

RTECS: VW0450000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## 12. ECOLOGICAL INFORMATION

### **Toxicity**

no data available

### **Persistence and degradability**

no data available

### **Bioaccumulative potential**

no data available

### **Mobility in soil**

no data available

### **PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### **Other adverse effects**

no data available

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## 13. DISPOSAL CONSIDERATIONS

### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### **Contaminated packaging**

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### **DOT (US), IMDG, IATA**

Not a dangerous goods.

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## 15. REGULATORY INFORMATION

### **SARA 302 Components**

Not required

### **SARA 313 Components**

Not required

### **SARA 311/312 Hazards**

Chronic Health Hazard

### **Massachusetts Right To Know Components**

Silicon carbide

CAS-No. 409-21-2

### **Pennsylvania Right To Know Components**

Silicon carbide

CAS-No. 409-21-2

**New Jersey Right To Know Components**

Silicon carbide

CAS-No. 409-21-2

**California Prop. 65 Components**

This product does not contain any chemical known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**16. DISCLAIMER**

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