



Material Safety Data Sheet

Carborundum

MSDS# 20700

Section 1 - Chemical Product and Company Identification

MSDS Name: Carborundum  
Catalog Numbers: C192-500  
Synonyms: Silicon Carbide.  
Company Identification: Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
For information in the US, call: 201-796-7100  
Emergency Number US: 201-796-7100  
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

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CAS#: 409-21-2  
Chemical Name: SILICON CARBIDE  
%: 100.0  
EINECS#: 206-991-8  
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Hazard Symbols: None listed  
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! May cause lung damage. May cause cancer based on animal studies. May cause eye, skin, and respiratory tract irritation. Target Organs: No data found.

Potential Health Effects

Eye: May cause eye irritation.  
Skin: Dust may cause mechanical irritation.  
Ingestion: May cause irritation of the digestive tract.  
Inhalation: Dust is irritating to the respiratory tract. May cause lung damage. Contains crystalline silica which may lead to respiratory abnormalities and silicosis.  
Chronic: Chronic inhalation of dust may lead to silicosis. May cause lung damage. May cause silicosis-disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, dry cough, shortness of breath, emphysema, decreased chest expansion and increased susceptibility to tuberculosis.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.  
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.  
Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.  
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.  
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved

General Information: or equivalent), and full protective gear. Material will not burn. Use extinguishing media appropriate to the surrounding fire. Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 0; instability: 0;

### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

### Section 7 - Handling and Storage

Handling: Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage: Store in a dry area.

### Section 8 - Exposure Controls, Personal Protection

| Chemical Name   | ACGIH  | NIOSH  | OSHA - Final PELs  |
|-----------------|--|--|--|
| SILICON CARBIDE | 10 mg/m <sup>3</sup><br>(nonfibrous, inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica); 3 mg/m <sup>3</sup><br>(nonfibrous, respirable fraction, particulate | 10 mg/m <sup>3</sup> TWA<br>(total dust); 5 mg/m <sup>3</sup> TWA<br>(respirable dust) | 15 mg/m <sup>3</sup> TWA<br>(total dust); 5 mg/m <sup>3</sup> TWA<br>(respirable fraction) |

OSHA Vacated PELs: SILICON CARBIDE: 10 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Personal Protective Equipment

Eyes: Wear safety goggles approved for the handling of explosive materials.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: colorless to black

Odor: none reported

pH: Not available

Vapor Pressure: Not applicable.

Vapor Density: Not available

Evaporation Rate: Not applicable.

Viscosity: Not applicable.

Boiling Point: Not applicable.

Freezing/Melting Point: 2700 deg C ( 4,892.00°F)

Decomposition Temperature: Not available

Solubility in water: insoluble in water

Specific Gravity/Density: 3.2

Molecular Formula: SiC

Molecular Weight: 40.0855

#### Section 10 - Stability and Reactivity

|  |                               |
|--|-------------------------------|
| Chemical Stability:                    | Stable.                       |
| Conditions to Avoid:                   | Dust generation, excess heat. |
| Incompatibilities with Other Materials | Not available                 |
| Hazardous Decomposition Products       | Oxides of silicon.            |
| Hazardous Polymerization               | Will not occur.               |

#### Section 11 - Toxicological Information

|                  |  |
|------------------|--|
| RTECS#:          | CAS# 409-21-2: VW0450000   |
| LD50/LC50:       | RTECS: Not available.  |
| Carcinogenicity: | SILICON CARBIDE - ACGIH: A2 - Suspected Human Carcinogen (fibrous, including whiskers) |
| Other:           | See actual entry in RTECS for complete information.                                    |

#### Section 12 - Ecological Information

|              |               |
|--------------|---------------|
| Ecotoxicity: | Not available |
|--------------|---------------|

#### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

#### Section 14 - Transport Information

US DOT

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

#### Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 409-21-2: Not available

Canada

CAS# 409-21-2 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not controlled.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 409-21-2 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 409-21-2 is listed on the TSCA  
Inventory.

Section 16 - Other Information

MSDS Creation Date: 12/12/1997

Revision #8 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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