

Hexoloy SiC Material Safety Datasheet

**Saint-Gobain Ceramics
Structural Ceramics**

Section 1 - Chemical Product and Company Identification

Chemical Name: Carbides

Synonyms: SILICON CARBIDE; CARBORUNDUM; CARBON SILICIDE

Manufacturer Information Saint-Gobain

Structural Ceramics Division
23 Acheson Drive
Niagara Falls, NY 14303

Phone: (716) 278-6212
Fax: (716) 278-2373
Emergency # 1-800-424-9300 (CHEMTREC)

NOTE: CHEMTREC emergency telephone number is to be used in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

Section 2 - Composition / Information on Ingredients

CAS #	Component	Percent
409-21-2	Silicon carbide	99-100

Component Information/Information on Non-Hazardous Components

Remaining components not determined hazardous and/or hazardous components present at less than 1% (0.1% for carcinogens).

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Section 3 - Hazards Identification

Emergency Overview

This is a non-combustible, non-reactive solid material. Exposure to dust may cause skin, eye and respiratory tract irritation.

Potential Health Effects: Eyes

Dusts from grinding may cause slight to moderate irritation with redness and pain.

Potential Health Effects: Skin

Chips and dusts from cutting and/or grinding may cause slight irritation by abrasion.

Potential Health Effects: Ingestion

Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Potential Health Effects: Inhalation

Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

HMIS Ratings: Health: 1 Fire: 1 Reactivity: 0 Pers. Prot.: safety glasses, gloves

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

Section 4 - First Aid Measures

First Aid: Eyes

Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Do not rub eyes. If irritation persists get medical attention.

First Aid: Skin

If skin becomes irritated, remove contaminated clothing. Wash area of contact thoroughly with soap and water. Do not rub or scratch exposed skin. If irritation persists, get medical attention.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract.

First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. Seek medical attention. If breathing is difficult, give oxygen.

First Aid: Notes to Physician

None.

Section 5 - Fire Fighting Measures

Flash Point: Not available

Method Used: Not available

Upper Flammable Limit (UFL): Not available

Lower Flammable Limit (LFL): Not available

Auto Ignition: Not available

Flammability Classification: Non-combustible Solid

Rate of Burning: Not available

General Fire Hazards

This material is not expected to be a fire hazard.

Hazardous Combustion Products

Oxides of silicon and carbon may be produced.

Extinguishing Media

Use methods for the surrounding fire.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0 Other:

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 6 - Accidental Release Measures

Containment Procedures

Contain by any means necessary. Block any potential routes to water systems.

Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Avoid the generation of dusts during clean-up.

Evacuation Procedures

Follow established emergency procedures.

Special Procedures

Follow all Local, State, Federal and Provincial regulations for disposal.

Section 7 - Handling and Storage

Handling Procedures

Avoid breathing dusts from this material. Avoid contact with skin and eyes. Wash thoroughly after handling. Keep formation of airborne dusts to a minimum. Use this product with adequate ventilation.

Components should be packaged for transport with sufficient protection from chipping or fracture by impact. Take precautions in handling to prevent damage by impact. Fractured material may have razor sharp edges. Use a wet brick saw or wet grinder for cutting or grinding of product.

Storage Procedures

Product packaging may contain product residue. Do not reuse.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines

A: General Product Information

Follow recommended exposure limits.

B: Component Exposure Limits

Silicon carbide (409-21-2)

ACGIH: 10 mg/m³ TWA (The value is for total dust containing no asbestos and <1% crystalline silica)

OSHA: total dust: 10 mg/m³ TWA; respirable fraction: 5 mg/m³ TWA

NIOSH: total: 10 mg/m³ TWA; respirable dust: 5 mg/m³ TWA

Engineering Controls

Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields.

Personal Protective Equipment: Skin

Use impervious gloves.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Eye wash fountain is recommended. Use good industrial hygiene practices in handling this material.

Section 9 - Handling and Storage

Appearance: No information available for the product.

Odor: Not determined

Physical State: solid

pH: Not applicable

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Boiling Point: Not available

Melting Point: Not determined

Solubility (H₂O): Insoluble

Specific Gravity: 3.1

\Molecular Weight: 40.100

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Avoid high airborne dust accumulation.

Incompatibility

Soluble in fused potassium hydroxide, fused alkalies, and molten iron. Above 700°C, contact with chlorine may form carbon and silicon tetrachloride. At temperatures above 800°C, contact with metal oxides may form metal silicides.

Hazardous Decomposition

Oxides of silicon and carbon may be produced.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

This product may cause eye, skin and respiratory irritation. Preexisting lung conditions may be aggravated by exposure to silicon carbide dusts. Chronic inhalation of silicon carbide dusts has not been shown to cause pneumoconiosis or other lung diseases.

B: Component Analysis - LD50/LC50

No LD50/LC50's are available for this product's components.

Carcinogenicity

A: General Product Information

No information available.

B: Component Carcinogenicity

Silicon carbide (409-21-2)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Epidemiology

No information available.

Neurotoxicity

No information available.

Mutagenicity

No information available.

Teratogenicity

No information available.

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

No information available.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Environmental Fate

No information available.

Section 13 - Disposal Considerations

US EPA Waste Number & Descriptions

A: General Product Information

No components are considered hazardous wastes according to Federal regulations (40 CFR 261) when discarded or disposed of as supplied.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations.

Section 14 - Transportation Information

US DOT Information

Shipping Name: Not regulated

Hazard Class: None

UN/NA #: None

Packing Group: None

Required Label(s): None

TDG Information

Shipping Name: Not regulated

Hazard Class: None

UN/NA #: None

Packing Group: None

Required Label(s): None

International Transportation Regulations

No additional information available.

Section 15 - Regulatory Information

US Federal Regulations

A: General Product Information

No additional information available.

B: Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Silicon Carbide	409-21-2	No	No	Yes	Yes	Yes	Yes

Other Regulations

A: General Product Information

WHMIS Classification: D2B

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Silicon Carbide	409-21-2	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Section 16 - Other Information

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

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