



Safety Data Sheet

In compliance with n°1907/2006/EC and US GHS

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Version : 2

SiC Hexoloy

Revision date: 09/11/2015

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Commercial name	SiC Hexoloy
Description	Silicon carbide – SiC
CAS number	409-21-2
EC number	206-991-8
REACH registration number	01-2119402892-42-0014

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses of the substance: Refractories, abrasives, steel manufacturing, ceramics.
Not recommended uses of the substance: Other than the identified uses indicated above.

1.3. Details of the supplier of the safety data sheet

Company name :	Saint-Gobain Ceramics, Structural Ceramics Division
Postal Address :	23 Acheson Drive, Niagara Falls, NY 14303
Country:	United States
Tel:	(716) 278-6212
Fax:	(716) 278-2373
E-mail:	lawrence.m.banach@saint-gobain.com (product manager)

1.4. Emergency telephone number

Emergency telephone number: # 1-800-424-9300 (CHEMTREC)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

CLP regulation EC 1272/2008	Not classified.
OSHA GHS (US)	Not classified

2.2. Label elements

Not required under Regulation EC 1272/2008 and OSHA GHS (US).

2.3. OTHER HAZARDS

SiC does not fulfil the criteria for the classification as PBT or vPvB.

NFPA Hazard Rating:	Reactivity: 0 Flammability: 0 Health: 0
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WHMIS	Not hazardous
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Section 3: Composition/information on ingredients

3.1. Substances

Contains SiC (EC N°: 206-991-8, CAS# 409-21-2) in the 99-100 % range

Contains traces of C, Si, Fe₂O₃, CaO, MgO and crystalline silica where the content of particles in respirable form is less than the limit being subject for classification. (< 0,1%)

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Section 4: First aid measures

4.1. Description of first aid measures

Inhalation	No special action required
Skin contact	No special action required Mechanical irritant, prolonged contact may cause skin abrasion Seek medical attention if needed
Eye contact	Flush with plenty of clean water Mechanical irritant, contact may cause tearing and redness Seek medical advice if irritation persists
Ingestion	No special action required

4.2. Most important symptoms and effects, both acute and delayed

Not applicable

4.3. Indication of any immediate medical attention and special treatment needed

No specific treatment required

Section 5: Fire fighting measures

5.1. Extinguishing media

General information	Not inflammable
Suitable extinguishing media	All extinguishing agents can be used.

5.2. Special hazards arising from the substance or mixture

No special exposure hazards known arising from the product itself, combustion products or resulting gases.

5.3. Advice for firefighters

<u>Specific fire fighting methods</u>	Does not require any particular methods
<u>Protection of fire-fighters</u>	Use appropriate protective equipment.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Limit dust formation, use disposable (P2 as a minimum) dust protection mask

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Pick up mechanically and dispose of in accordance to regulations

6.4. Reference to other sections

See also section 7 and 8.

Section 7: Handling and storage

7.1. Precautions for safe handling

Technical measures	Ensure areas are well ventilated. Minimize dust formation
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Precautions to be taken

For operations generating dust: Wear N95, FFP2 or FFP3 dust mask.

7.2. Conditions for safe storage, including any incompatibilities

No special precautionary measures

7.3. Specific end use(s)

See section 1.1

Section 8: Exposure control / personal protection

8.1. Control parameters

	8 hours TWA (mg / m ³)	
	Inhalable (total) dust	Respirable dust
France	10	5
Germany	10	3
USA (ACGIH)	10	3

8.2. Exposure control



Occupational exposure controls:

Provide adequate ventilation. Mechanical ventilation may be required. Do not eat, drink or smoke during work. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier or the personal protective equipment. The listed protective equipment is a recommendation. A risk assessment of the actual risk may lead to other requirements.

EYE/FACE PROTECTION

Eye protection: Wear approved safety goggles

SKIN PROTECTION

Hand protection: Use gloves suitable for the work. The product is solid and cannot penetrate normal glove materials.

Skin protection (other than the hands): Wear appropriate protective clothing to protect against skin contact.

RESPIRATORY PROTECTION

Respiratory protection: Use mask with N95, FFP2 or FFP3 filter in case of dust formation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Odor:	None
Solubility in water :	Insoluble
Specific gravity:	Value: ~3, 1 g/cm ³
Flash point:	Not applicable
Explosive properties:	Not applicable
Explosion limit:	Not applicable



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Spontaneous combustibility: Not applicable
Oxidizing properties: Not applicable

9.2. Other information

No data

Section 10: Stability and reactivity

10.1. Reactivity

Not reactivity hazards

10.2. Chemical stability

The material is stable under normal temperature conditions

10.3. Possibility of hazardous reactions

No hazardous reactions known

10.4. Conditions to avoid

Not applicable

10.5. Incompatible materials

Soluble in fused potassium hydroxide, fused alkalis, 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.

10.6. Hazardous decomposition products

Oxides of silicon and carbon may be produced.

Section 11: Toxicological information

11.1. Information on toxicological effects

General information No hazardous effects known, if used under normal conditions

“Non-fibrous forms of SiC, sometimes referred to as “angular” particles, are irregular in shape and occur as respirable and non-respirable particles. The non-fibrous forms of SiC have very low toxicity in humans and experimental animals. The TLV-TWA for non-fibrous forms, is therefore, set at the level of “poorly” soluble particles, not otherwise specified (PNOS), being 10 mg/m³ for inhalable particles, and 3mg/m³ for respirable particles.” (ACGIH Toxicology review 2001).

(a) acute toxicity	.....	no harmful effects identified, based on available data
(b) irritation	.....	no harmful effects identified, based on available data
(c) corrosivity	.....	no harmful effects identified, based on available data
(d) sensitisation	.....	no harmful effects identified, based on available data
(e) repeated dose toxicity	.....	no harmful effects identified, based on available data
(f) carcinogenicity	.....	no harmful effects identified, based on available data
(g) mutagenicity	.....	no harmful effects identified, based on available data
(h) toxicity for reproduction	.....	no harmful effects identified, based on available data

Section 12: Ecological information

12.1. Toxicity. no harmful effects identified, based on available data

12.2. Persistence and degradability . chemically inert and insoluble in water; separation by mechanical processes (sedimentation, filtration, etc...)

12.3. Bioaccumulative potential . no potentials known

12.4. Mobility in soil. no environmental problems known

12.5. Results of PBT and vPvB assessment . no PBT or vPvB substance

12.6. Other adverse effects. no environmental problems expected, if handled and treated in accordance with standard industrial practice

Section 13: Disposal considerations

13.1. Waste treatment methods

Material Not classified as hazardous waste; observe local bye-laws.
No EPA Waste Numbers are applicable

Packaging Packaging has to be emptied entirely;
recycling of used packaging is recommended;
local bye-laws must be considered.

Section 14: Transport information

- 14.1 UN number. Not applicable, non hazardous material
- 14.2 UN proper shipping name. Not applicable, non hazardous material
- 14.3 Transport hazard class(es). Not applicable, non hazardous material
- 14.4 Packing group. Not applicable, non hazardous material
- 14.5 Environmental hazards. Not applicable, non hazardous material

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SiC is not classified as a hazardous substance.

Labelling according to Regulation EC 1272/2008 and OSHA GHS (US) is not required.

All ingredients are listed on TSCA (Toxic Substance Control Act).

None of the substances are listed in Proposition 65 (California).

15.2 Chemical Safety Assessment

Not relevant

Section 16: Other information

Restrictions of use This product must not be used for applications other than those indicated in section 1.

Replace sheet 06/01/2010

Supplier`s notes: The information contained in this SDS must be available to all those who handle the product.

Responsible for safety data sheet: Saint-Gobain Ceramic Materials.

Information concerning the modifications:

- mention of US GHS in sections 2 and 15
- modification of the format
- update of the informations of sections 11 to 14 with the SiCMA information.

This sheet completes the technical sheets but it does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith.

The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended.

This does not in any way excuse the user from knowing and applying all the regulations governing his activity.

It is the sole responsibility of the user to take all precautions required in handling the product.

The mandatory regulations mentioned are only intended to help the user to fulfil his obligations regarding the use of hazardous products.

This listing must not be considered exhaustive. It does not exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible.