



## SILICON CARBIDE

### Black or Green

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### 1 – Identification of the substance

**Product Name :** Silicon Carbide  
**Chemical Name :** SIC  
**Reach Reg n° :** 01-2119402892-42-0014  
**Use of the substance/preparation :** Refractories, abrasives, steel manufacturing, ceramics.

### 2 – Composition / Information on ingredients

Component name	Identification	Classification	Contents
Silicon carbide	CAS n° 409-21-2 EC n° 206-991-8		75 – 99 %
<b>Column headings</b>	CAS n° = Chemicals abstracts Service ; EU (Einecs or Elincs number) = European inventory of Existing Commercial Chemical Substances ; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in ; %, % wt/wt, % vol/wt, % vol/vol, mg/m <sup>3</sup> , ppb, ppm, weight%, vol%		
<b>HH/HF/HE</b>	T+= Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = irritating, E = Explosive, O = Oxidizing, F+ = Extremely flammable, F = Very flammable, N = Environmental hazard.		
<b>Component comments</b>	Contains traces of C, Si, Fe <sub>2</sub> O <sub>3</sub> , CaO, MgO and crystalline silica where the content of a=quarts in respirable form is less than the limit being subject for classification. (<0,1%).		

### 3 – Hazards Identification

**Description of hazard** The substance is not classified as dangerous according to Regulation (EC) n°1272/2008. The substance is not classified as dangerous according to directive 67/548/EEC.

## 4 – First Aid Measures

### Description of First Aid Measures :

<b>General :</b>	If in doubt, seek medical advice.
<b>Inhalation :</b>	Fresh air and rest. Get medical attention if any discomfort continues.
<b>Skin contact :</b>	Wash with water and soap as a precaution. Get medical attention if any discomfort continues.
<b>Eye contact :</b>	Immediately rinse with water for several minutes. Remove any contact lenses. Contact physician if discomfort continues.
<b>Ingestion :</b>	Not relevant Rinse nose, mouth and throat with water. Consult a physician for specific advise.

### Most important symptoms and effects, both acute and delayed :

**Acute symptoms and effects :** None known.

**Delayed symptoms and effects :** None known.

### Indication of any immediate medical attention and special treatment needed :

**Other Information :** No specific treatment required.

## 5 – Fire Fighting Measures

**Suitable extinguishing media :** Use fire-extinguishing media appropriate for surrounding materials.

**Fire and explosion hazards :** The product is non-combustible.

**Personal protective equipment :** Use fresh air equipment when the product is involved in fire. In case of evacuation, an approved protection mask should be used. See also sect. 8.

## 6 – Accidental Release Measures

**Personal precautions :** Avoid dust formation. Use protective equipment as referred to in sect. 8.

**Environmental precautions :** avoid release to the environment.

**Method for cleaning :** Use mechanical handling equipment. Collect in suitable containers and deliver as waste according to section 13.

**Other instructions :** See also section 7.

## 7- Handling and Storage

**Handling :** Avoid handling which leads to dust formation. Use protective equipment as referred to in section 8. Avoid inhalation of dust. Avoid contact with eyes and skin.

**Storage :** No special storage precautions noted.

**Further information on storage :** None.

**Specific use(s) :** No information given.

## 8 – Exposure Controls / Personal Protection

### **Exposure limit values :**

Component name	Identification	Value	Year
Respirable dust		8 h : 4 mg/m <sup>3</sup>	2007
Total Inhalable dust		8 h : 10mg/m <sup>3</sup>	2007

## Exposure controls :

### Safety signs :



**Occupational exposure controls :** Provide adequate ventilation. Mechanical ventilation may be required. Do not eat, drink or smoke during work. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye protection :** Wear approved safety goggles.

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

**Skin protection :** Wear appropriate protective clothing to protect against skin contact.

**Respiratory protection :** Use mask with filter P2/P3 in case of dust formation.

## 9 – Physical and Chemical Properties

<b>Physical state :</b>	Powder, grains.
<b>Odour :</b>	None.
<b>Colour :</b>	Green, dark green and black.
<b>Solubility in water :</b>	Insoluble.
<b>Specific gravity :</b>	<b>Value :</b> ~3,2 g/cm <sup>3</sup> .
<b>Bulk density :</b>	<b>Value :</b> 700-1700 kg/m <sup>3</sup> .
<b>Flash point :</b>	<b>Comments :</b> Not applicable.
<b>Explosive properties :</b>	<b>Properties :</b> Not applicable.
<b>Explosion limit :</b>	<b>Comments :</b> Not applicable.
<b>Spontaneous combustability :</b>	<b>Comments :</b> Not applicable.
<b>Oxidising properties :</b>	Not applicable.

**Physical and chemical properties :** Dustiness < 0,1 % according to EN 15051 standard.

## 10 – Stability and Reactivity

<b>Reactivity :</b>	No reactivity hazards.
<b>Stability :</b>	Stable under normal temperature conditions and recommended use.
<b>Possibility of hazardous reactions :</b>	No hazardous reactions known.
<b>Conditions to avoid :</b>	None known.
<b>Materials to avoid :</b>	None expected.
<b>Hazardous decomposition product :</b>	No hazardous decomposition productions.

## 11 – Toxicological Information

**General :** 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 10mg/m<sup>3</sup> for inhalable particles, and 3mg/m<sup>3</sup> for respirable particles. (ACGIH Toxicology review 2001).

<b>Inhalation :</b>	May cause irritation to the respiratory system.
<b>Skin contact :</b>	Dust may irritate the skin in a mechanical way.
<b>Eye contact :</b>	Dust may irritate eyes mechanically.
<b>Ingestion :</b>	Not likely due to product form.
<b>Chronic effects :</b>	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
<b>Sensitisation :</b>	Sensitizing properties are not known.
<b>Carcinogenicity :</b>	Carcinogenic properties are not known.
<b>Teratogenic properties :</b>	Effects on fetus development are not known.
<b>Reproductive toxicity :</b>	Effects harmful to reproduction are not known.
<b>Mutagenicity :</b>	Mutagenic properties are not known.

## 12 – Ecological information

<b>Ecotoxicity:</b>	The product is not classified as dangerous for the environment.
<b>Persistence and degradability :</b>	Contains only inorganic chemicals. Separation by mechanical processes (sedimentation, filtration, etc...).
<b>Bioaccumulative potential :</b>	Not expected to bioaccumulate.
<b>Mobility :</b>	Inert material not soluble in water. Will sink in water.
<b>PBT assessment results :</b>	No PBT or vPvB substance.
<b>Environmental details, conclusion :</b>	The product is not regarded as environmental hazardous.

## 13 – Disposal Considerations

<b>EWC waste code :</b>	EWC : 06 08 99 wastes not otherwise specified.
<b>Product classified as hazardous waste :</b>	No
<b>Packaging classified as hazardous waste :</b>	No

## 14 – Transport information

<b>Other applicable information :</b>	Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/CAO regulations.
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## 15 – Regulatory information

<b>References (laws/regulations) :</b>	CHIP Regulations. The Chemicals (Hazard Information and Packaging for Supply) Regulation. Directive (EC) N° 1907/2006 (REACH) Annex II : Safety Data Sheets. Occupational Exposure Limits. EH40/2007. The Hazardous Waste (England and The Safety Data Sheet is based on information provided by the producer.
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## 16 – Other Information

### Supplier's notes

The information contained in this MSDS must be made available to all those who handle the product.

English	Français	Deutsch	Español	中文	
Wear safety glasses; wash with large amount of water in case of eyes contact.	Utiliser des lunettes de sécurité; laver à grande eau en cas de contact oculaire.	Sicherheitsbrille tragen; Nach Augenkontakt mit viel Wasser auswaschen.	Utilizar gafas de seguridad. Lavar los ojos con abundante agua en caso de contacto ocular.	请佩戴防护眼镜；万一眼中注入了碳化硅请用大量清水进行冲洗。	
Protective gloves are recommended.	Les gants de protection sont recommandés.	Schutzhandschuhe werden empfohlen.	Se recomienda el uso de guantes.	请佩戴防护手套。	
Minimize dust generation when handling & processing; comply with applicable dust exposure limits; if necessary use local exhaust ventilation and respiratory protection.	Eviter la production de poussières ; se conformer aux valeurs limites d'exposition ; si nécessaire utiliser la ventilation locale et la protection respiratoire.	Staubzeugung während der Handhabung u. Verarbeitung vermeiden; die gültigen Staubbelastungsgrenzen einhalten; wenn nötig lokale Absaugventilatoren und Atemschutz verwenden.	Evitar la generación de polvos; cumplir con los límites de exposición para polvos. Si fuese necesario, utilizar ventilación y protección respiratoria adecuada.	在搬运和加工过程中请尽可能减少灰尘产生；不同工作现场应遵循与工作现场相适应的有关灰尘泄露限制规定；如果必要，请尽量使用移动式风球气装置，佩戴防护口罩。	
Products may contain traces of respirable crystalline silica far below the 0.1% regulatory limit.	Ce produit peut contenir des traces de silice cristalline alvéolaire, bien en dessous du seuil réglementaire de 0,1%.	Produkte können Spuren weit unterhalb des vorgeschriebenen Grenzwertes von 0,1% der einatembaren kristallinen Kieselsäure enthalten.	Los productos pueden contener trazas de silice cristalina respirable por debajo del límite admisible del 0,1%.	产品可能含有微量可吸入的低于正常规定0.1%的硅粉。	
Refer to Material Safety Data Sheet (MSDS).	Consulter la Fiche de Données de Sécurité.	Siehe Sicherheitsdatenblatt.	Consultar las hojas de seguridad del material.	参见产品的相关化学品安全技术说明书。	