



## Silicon carbide

### Introduction

**Silicon carbide** has two common basic varieties of black silicon carbide and green silicon carbide, all of which are  $\alpha$ -SiC.

1. **Black silicon carbide** contains about 95% SiC, and its toughness is higher than that of green silicon carbide.
2. **Green silicon carbide** contains more than 97% SiC, and has good self-sharpness.
3. In addition, there is cubic silicon carbide, which is a yellow-green crystal made by a special process.



### Specification & Application

1. **Black silicon carbide:** It is mostly used for processing materials with low tensile strength, such as glass, ceramics, stone, refractory materials, cast iron and non-ferrous metals.
2. **Green silicon carbide:** It is mostly used for processing hard alloys, titanium alloys and optical glass. It is also used for honing cylinder liners and fine grinding high speed steel tools.
3. **Cubic silicon carbide:** The abrasives made of it is suitable for super-finishing of bearings, and the surface roughness can be processed from Ra32 to 0.16 micron to Ra 0.04 to 0.02 micron.

## Corundum

### Introduction

The **corundum filter material** is made of corundum block through crushing, sieving and selective processing. It is with good appearance gloss, high mechanical strength, high melting point, large specific ratio, acid resistance, wear resistance, strong interception ability; stable chemical properties, no dissolution in acidic, neutral and alkaline water.

### Application

It is usually used for sewage treatment.



### Technical Parameter

Items	Index	Items	Index
strength	7.5-8.0	SiO <sub>2</sub>	38-40%
Melting point	1338-1450°C	CaO	8.5%
Specific gravity	3.7-4.5t/m <sup>3</sup>	MgO	5-6%
Acid resistance	98.81%	FeO	18-20%
Alkali resistance	98.62%	Al <sub>2</sub> O <sub>3</sub>	20-23%
Bulk density	1.8t/m <sup>3</sup>	Fe <sub>2</sub> O <sub>3</sub>	4.5%