

Black Silicon Carbide Grit

Material: Sic
Bulk density:1.45-1.56g/cm³
Ture density:3.12 g/cm³
Size:F12-F220
Color:Black
Shape:Granular grit
SiC Content:98.5% Min
Crystalsystem:Hexagonal
Usage:Polishing.Grinding and Sandblasting



Because of the rarity of natural moissanite, most silicon carbide is synthetic. It is used as an abrasive, and more recently as a semiconductor and diamond simulant of gem quality. The simplest manufacturing process is to combine silica sand and carbon in an Acheson graphite electric resistance furnace at a high temperature, between 1,600 °C (2,910 °F) and 2,500 °C (4,530 °F). Fine SiO₂ particles in plant material (e.g. rice husks) can be converted to SiC by heating in the excess carbon from the organic material. The silica fume, which is a byproduct of producing silicon metal and ferrosilicon alloys, also can be converted to SiC by heating with graphite at 1,500 °C (2,730 °F).

Specifications

Black Silicon Carbide Chemical Composition (%)

Grit	Sic	F.C.	Fe ₂ O ₃
F12-F90	≥98.50	<0.20	≤0.60
F100-F150	≥98.00	<0.30	≤0.80
F180-F220	≥97.00	<0.30	≤1.20
F230-F400	≥96.00	<0.40	≤1.20
F500-F800	≥95.00	<0.40	≤1.20
F1000-F1200	≥93.00	<0.50	≤1.20
P12-P90	≥98.50	<0.20	≤0.60
P100-P150	≥98.00	<0.30	≤0.80
P180-P220	≥97.00	<0.30	≤1.20
P230-P500	≥96.00	<0.40	≤1.20
P600-P1500	≥95.00	<0.40	≤1.20
P2000-P2500	≥93.00	<0.50	≤1.20

Black Silicon Carbide Physical Index

Grits	Bulk Density (g/cm ³)	High Density (g/cm ³)	Grits	Bulk Density (g/cm ³)	High Density (g/cm ³)
F16 ~ F24	1.42~1.50	≥1.50	F100	1.36~1.45	≥1.45
F30 ~ F40	1.42~1.50	≥1.50	F120	1.34~1.43	≥1.43
F46 ~ F54	1.43~1.51	≥1.51	F150	1.32~1.41	≥1.41
F60 ~ F70	1.40~1.48	≥1.48	F180	1.31~1.40	≥1.40
F80	1.38~1.46	≥1.46	F220	1.31~1.40	≥1.40
F90	1.38~1.45	≥1.45			

Black Silicon Carbide Size Available

F12-F1200, P12-P2500

0-1mm, 1-3mm, 6/10, 10/18, 200mesh, 325mesh

Other special specifications could be supplied on request.

Application

- ① For abrasive: Lapping, Polishing , Coatings, Grinding , Pressure blasting.
- ② For refractory: Refractory media for casting or metallurgical linings ,Technical Ceramics.
- ③ For new-type application: Heat exchangers ,Semiconductor process equipment , Liquid filtration.