

Black Silicon Carbide – SIC

Black silicon carbide consists of crystalline silicon carbide, which is produced from silica sand and petroleum coke in electric resistance furnaces at temperatures of > 2.300 °C. Silicon carbide is iron-free, angular and extremely hard.

Applications

- Reusable abrasive
- Grinding, lapping and polishing medium
- Grinding wheels and grinding medium
- Wear-resistant and refractory products

Blasting systems

- Pressure blast systems
- Injection blast cabinets

Typical physical properties

Hardness	approx. 9 – 10 mohs
Grain shape	angular
Melting point	approx. 2300 °C
Specific gravity	approx. 3,2g/cm ³
Bulk density <small>depending on granular size</small>	approx. 1,3 – 1,5g/cm ³

Typical chemical analysis

SIC	98,00 %
Fe ₂ O ₃	0,24 %
C-frei	0,50 %
Magnetic particles	0,12 %

Packaging

- 25 kg bags on pallet up to 1 ton
- 1 ton loose in big bag

Available sizes

FEPA	Average grain size (µm)
F 008	2000 – 2800
F 010	1700 – 2360
F 012	1400 – 2000
F 014	1180 – 1700
F 016	1000 – 1400
F 020	850 – 1180
F 022	710 – 1000
F 024	600 – 850
F 030	500 – 710
F 036	425 – 600
F 040	355 – 500
F 046	300 – 425
F 054	250 – 355
F 060	212 – 300
F 070	180 – 250
F 080	150 – 212
F 090	125 – 180
F 100	106 – 150
F 120	90 – 125
F 150	63 – 106
F 180	63 – 90
F 220	53 – 75
Metric	Average grain size (mm)
	0,50 – 1,00
	1,00 – 2,00
	1,00 – 3,00

Other grain sizes can be produced if required.