



Black Silicon Carbide

Technical Data Specification – Typical

Black Silicon Carbide is produced at high temperature in an electric resistance type furnace with quartz sand and petroleum coke as its main raw materials. Its hardness is between fused alumina and synthetic diamond.

Mechanical intensity of it is higher than fused alumina. It is brittle and sharp and has electrical and heat conductivity in some degree. The abrasives made of it are suitable for working on cast iron, non-ferrous metal, rock, leather, rubber, etc. It is also broadly used as refractory material and metallurgical additive.

Black SiC F12-F220

| | SiC \geq % | | F.C \leq % | | Fe ₂ O ₃ \leq % | |
|-------------|--------------|---------|--------------|---------|---|---------|
| | Normal | Special | Normal | Special | Normal | Special |
| F12 – F90 | 98.50 | 99.00 | 0.20 | 0.10 | 0.60 | 0.20 |
| F100 – F150 | 98.00 | 99.00 | 0.30 | 0.15 | 0.80 | 0.25 |
| F180 – F220 | 97.00 | 99.00 | 0.30 | 0.15 | 1.20 | 0.20 |

Bulk Density

| Grit | Normal Bulk Density | High Bulk Density | Grit | Normal Bulk Density | High Bulk Density |
|-----------|---------------------|-------------------|------|---------------------|-------------------|
| 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 | | | |

Application:

Black Silicon Carbide is suitable for make grinding wheels, cutting wheels, mounted wheels, oil stone, abrasive media, and also suitable for surface grinding, lapping or polishing. The abrasive products made of it are suitable for working on Cast Iron, Non-ferrous Metal, Rock, Leather, Rubber, Wood, Ceramic, etc. Black Silicon Carbide is also broadly used as high-grade refractory material and metallurgical additive.

Packing: 1 Ton Jumbo Bags / 25 Kg PP or Paper Bags