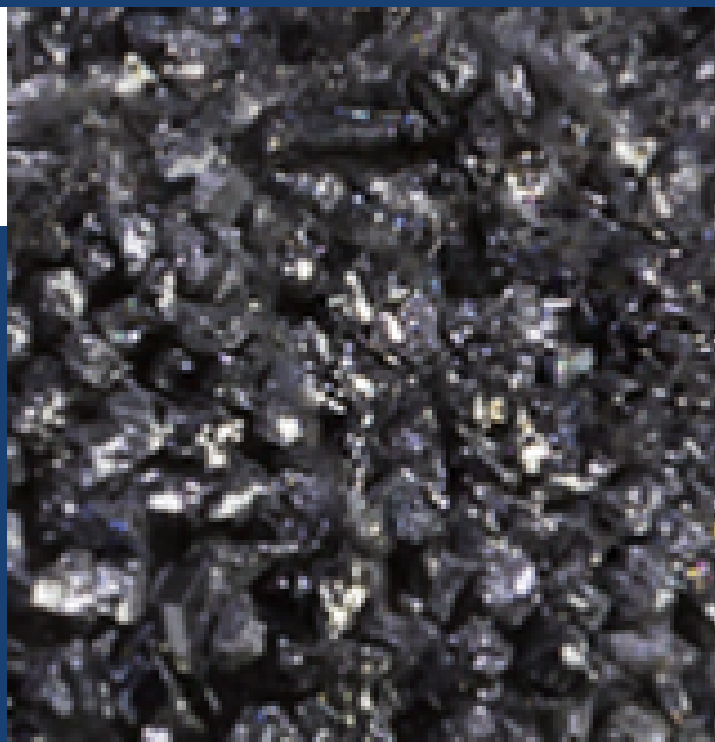




ABRASIVE

Silicon Carbide

Silicon Carbide delivers extreme hardness, fast cutting, and reliable performance for high-endurance applications.



Silicon Carbide, also known as carborundum, is a compound of silicon and carbon produced from quartz and petroleum coke in electric furnaces at 2200 °C. It is an extremely hard, sharp, and aggressive abrasive with high chemical stability and resistance to oxidation. Its hardness enables fast cutting and effective cleaning or etching of very hard surfaces, while remaining unaffected by acids and only reactive to alkali at very high temperatures.

Performance

- **Extreme Hardness:** Provides aggressive cutting and grinding action
- **Chemical Stability:** Resistant to oxidation and unaffected by acids
- **High-Temperature Endurance:** Maintains performance under high heat and voltage conditions
- **Fast Cutting Speed:** Efficiently cleans and etches hard surfaces
- **Durable Ceramics Formation:** Bonds into high-strength ceramics for demanding applications

Features

- **High strength:** Ensures reliable mechanical performance in abrasive and ceramic applications.
- **High hardness:** Enables precision cutting, grinding, and polishing of tough materials.
- **Aggressive abrasive action:** Reduces cycle times with faster material removal.
- **Stable under harsh conditions:** Performs consistently in chemical and thermal extremes.



Major Industries & Applications

Aerospace / Aviation

High-strength components and surface preparation

Automotive

Brakes, clutches, and polishing operations

Foundry / Die Cast

Grinding and finishing of non-ferrous materials

Granite / Stone Cutting

Fast cutting and carving of hard surfaces

Semiconductor Manufacturing

High-temperature and high-voltage electronic applications

Chemical Composition

Grade	SiC	FC	Fe ₂ O ₃
12-90	>98.5%	<0.2	<0.6
100-180	98%	<0.3	<0.8
220-240	97%	<0.3	<1.2

Physical Characteristics (Typical)

Bulk Density	1760 kg/M ³
Particle Specific Gravity	3.2 g/cc
Hardness (Mohs)	9.15
Shape	Sharp, Angular

Available Sizes

Grade	Microns	Grade	Microns
#8	2360 - 2800	#54	300 - 355
#10	2000 - 2360	#60	250 - 300
#12	1700 - 2000	#70	212 - 250
#14	1400 - 1700	#80	180 - 212
#16	1180 - 1400	#90	150 - 180
#20	1000 - 1180	#100	125 - 150
#22	850 - 1000	#120	106 - 125
#24	710 - 850	#150	75 - 106
#30	600 - 170	#180	63 - 90
#36	500 - 600	#220	53 - 75
#40	425 - 500	#240	45 - 53
#46	355 - 425		

Packaging

25 kg bags packed in 1 MT pallet