

Green Silicon Carbide

High Purity Green Silicon Carbide for Abrasive Applications

Electro Abrasives, LLC. manufactures Green Silicon Carbide powders by water classification at our state-of-the-art headquarters in Buffalo, NY USA. All chemistry and sizing is controlled to meet exact customer requirements. All Green Silicon Carbide manufactured at Electro Abrasives, LLC meets or exceeds ANSI or FEPA standards for product quality.

ABOUT:

Green Silicon Carbide (SiC) is an extremely hard (Mohs 9.4 / 2,600 Knoop) man made mineral that possesses high thermal conductivity and high strength at elevated temperatures (at 1,000°C, SiC is 7.5 times stronger than Al₂O₃). SiC has a modulus of elasticity of 410 GPa, with no decrease in strength up to 1,600°C, and it does not melt at normal pressures but instead dissociates at 2,700°C.

APPLICATIONS:

Green Silicon Carbide is extremely pure. It can be manufactured into many complex bond-end shapes for many applications including wear resistant seals/rings/nozzles, coatings, metal-matrix composites, kiln furniture, silicon carbide heating elements, body & vehicle armor, and many other applications.

Typical Physical Properties

Hardness	Melting Point	Color	Specific Gravity	Particle Shape	Color
2,600 Knoop 9.4 Mohs	Sublimes at 4,892°F (2,700°C)	Green	3.2 g/cc	Blocky, Sharp	Green

Chemical Analysis by XRF (%)

SiC	SiO ₂	Si	Fe	C
99	0.4	0.25	0.05	0.2

Grit Size

MACRO	MICRO
14 grit - 240 grit	F320 grit - F1500 grit, 0.7 micron

* Other grit sizes upon request.

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