

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 complex bonded shapes or used as a loose abrasive. Applications/uses include vitrified & resinoid grinding wheels, honing stones, blasting grain/powder, compounds, lapping, polishing and many more.

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.

The information contained in this data sheet has been determined through the application of accepted engineering practice and is believed to be reliable. Since the conditions of application and use of our products are beyond our control, no warranty is expressed or implied regarding accuracy of the information, the results to be obtained from use of the product, or that such use will not infringe on any patent. This information is furnished with the express condition that you will make your own tests to determine the suitability of the product for your particular use.

