



# ELECTROCARB<sup>®</sup> BLACK SILICON CARBIDE

## #1 GRADE SILICON CARBIDE FOR ABRASIVE APPLICATIONS

Electro Abrasives, LLC. manufactures Black Silicon Carbide grains & powders in sizes to meet all of our customers' needs. It is manufactured by a team of professionals dedicated to provide our customers the best in quality, service, and support.

### **ABOUT:**

ELECTROCARB<sup>®</sup> Black Silicon Carbide (SiC) is an extremely hard (Mohs 9.1 / 2550 Knoop) man made mineral that possesses high thermal conductivity and high strength at elevated temperatures (at 1000°C, SiC is 7.5 times stronger than Al<sub>2</sub>O<sub>3</sub>). SiC has a modulus of elasticity of 410 GPa, with no decrease in strength up to 1600°C, and it does not melt at normal pressures but instead dissociates at 2600°C.

### **APPLICATIONS:**

ELECTROCARB<sup>®</sup> Black Silicon Carbide contains some free silicon (Si) and carbon (C) and is not as pure as green SiC. It is ideal for a wide variety of applications including vitrified and resinoid grinding wheels, friction, blasting, compounds, lapping, polishing, non-slip, wiresawing silicon & quartz, and many more.

<b>TYPICAL CHEMICAL ANALYSIS</b>	
SiC	97.7%
SiO <sub>2</sub>	0.7%
Si	0.8%
Fe	0.2%
Al	0.3%
C	0.3%

<b>TYPICAL PHYSICAL PROPERTIES</b>	
Hardness:	Knoop: 2550 Mohs: 9.1
Melting Point:	Sublimes at 4712°F (2600°C)
Particle Shape:	Blocky, with sharp edges OR Angular, with sharp edges ("P")
Color:	Black

### **AVAILABLE SPLIT SIZES**

46/70, 54/70, 60/90, 100/120, 120/220, 150/220, 180/240, 800/F

### **AVAILABLE SINGLE GRIT SIZES**

**Macro:** 8 grit - 240 grit (ANSI); P12 - P220 (FEPA)

**Micro:** F280 grit - F1200 grit (FEPA); P240 - P3000 (FEPA)

Other Sizes Available 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.



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