**Electrocarb® 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® 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 Al₂O₃). 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® 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.

**Typical Chemical Analysis**

<table>
<thead>
<tr>
<th>Component</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SiC</td>
<td>97.7%</td>
</tr>
<tr>
<td>SiO₂</td>
<td>0.7%</td>
</tr>
<tr>
<td>Si</td>
<td>0.8%</td>
</tr>
<tr>
<td>Fe</td>
<td>0.2%</td>
</tr>
<tr>
<td>Al</td>
<td>0.3%</td>
</tr>
<tr>
<td>C</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

**Typical Physical Properties**

- 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

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