# GNP Ceramics, LLC

# Technical Data

# Black Silicon Carbide

**Typical Chemistry**

| | |
|---|---|
| Silicon Carbide (SiC) | 97.95% |
| Silicon (Si) | .48% |
| Silicon Dioxide (SiO2) | .55% |
| Carbon (C) | .29% |
| Iron (Fe) | .09% |
| Aluminum (Al) | .10% |
| Other | .54% |

**Physical Characteristics**

| | |
|---|---|
| Crystal Form: | Hexagonal (Alpha SiC) |
| True Density: | 3.21 g/cm$^3$ |
| Melting Point: | Dissociates at ~2500 C |
| Hardness: | Knoop (100) -2500; Mohs 9.0+ |

**Test Methods**

Sizing: FEPA F Standard 42-1:2006
FEPA P Standard 43-1:2006
ANSI B74.12-2003
ANSI B74.4-1992 (R2002)
Customer Specific Standards

***Black Silicon Carbide***

*Description:*

*Silicon Carbide is produced at a high temperature in an electrical resistance arc furnace with quartz and petroleum coke as it primary raw materials. The final product is sharp and friable with outstanding electrical and thermal conductivity properties. GNP Ceramic's Black Silicon Carbide grains are produced using various techniques to optimize shape, surface area, and density.*

*Applications:*

*GNP Ceramic's Black Silicon Carbide is used for pressure blasting, lapping, bonded and coated applications, refractory materials, and precision ceramics.*

*Contact us:*

*8500 Roll Rd*
*Clarence Center, NY 14032*
*phone 716-406-2222*
*fax 716-406-2226*