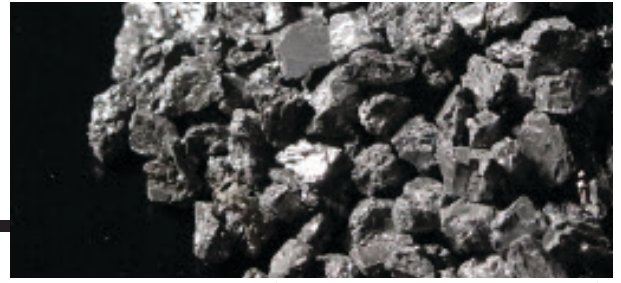




GNP Graystar

Specialty Materials



TECHNICAL DATA SHEET

Black Silicon Carbide

Typical Chemistry

	Macrogrits	Microgrits
Silicon Dioxide (SiO ₂)	98.00 %	98.60 %
Free Carbon (C)	0.25 %	0.15 %
Silicon Dioxide (Si)	0.70 %	0.60 %
Free Silicon (Si)	0.80 %	0.50 %
Iron (Fe ₂ O ₃)	0.10 %	0.08 %

Physical Characteristics

Crystal Form	Hexagonal (Alpha SiC)
True Density	3.21 g/cm ³
Melting Point	Dissociates at Approx. 2500°C
Color	Black, Greyish
Hardness	Knoop (100): 2500 Mohs: 9.0+

Test Methods

Chemistry	ANSI B74.15
Bulk Density	ANSI B74.4
Macrogrit Sizing	FEPA F Standard 42-1:2006 FEPA P Standard 43-1:2006 ANSI B74.12-2003 Customer Specific Standards
Microgrit Sizing	FEPA F Standard 42-2:2006 FEPA P Standard 43-2:2006 JIS R 6001-1987 Custom Sizes Available

Description:

GNP Graystar's Black Silicon Carbide is produced in an electrical resistance arc furnace with quartz and petroleum coke as its primary raw materials. The final product is sharp and friable with outstanding electrical and thermal conductivity properties.

GNP Graystar's Black Silicon Carbide grains and powders are produced using various techniques to optimize shape, surface area, and density.

Applications:

GNP Graystar's Black Silicon Carbide is used for bonded and coated abrasives, wiresawing semiconductor materials, lapping, pressure blasting, refractory materials, precision ceramics, non-woven abrasive production, anti-skid, and other critical applications.

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Rev. 02/2020

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