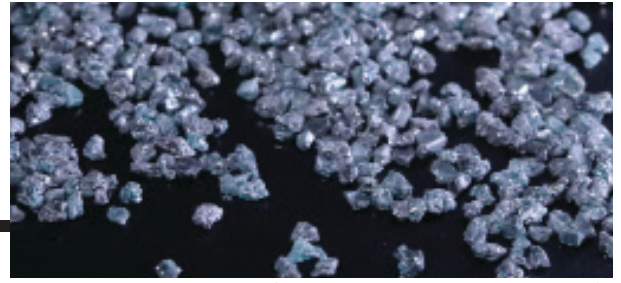




GNP Graystar

Specialty Materials



TECHNICAL DATA SHEET

Green Silicon Carbide

Typical Chemistry

	Macrogrits	Microgrits
Silicon Dioxide (SiO ₂)	99.10 %	99.15 %
Free Carbon (C)	0.10 %	0.10 %
Silicon Dioxide (Si)	0.50 %	0.35 %
Free Silicon (Si)	0.15 %	0.15 %
Iron (Fe ₂ O ₃)	0.10 %	0.10 %

Physical Characteristics

Crystal Form	Hexagonal (Alpha SiC)
True Density	3.21 g/cm ³
Melting Point	Dissociates at Approx. 2500°C
Color	Green
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
Microgrit Sizing	FEPA F Standard 42-2:2006 FEPA P Standard 43-2:2006 JIS R 6001-1987

Description:

GNP Graystar's Green Silicon Carbide is a high purity silicon carbide produced in an electrical resistance arc furnace with high purity quartz and coke as its primary raw materials. The final product produces a harder, sharper, and more friable crystal than black silicon carbide.

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

Applications:

GNP Graystar's Green Silicon Carbide macrogrits are typically used for grinding high alloys where cool cutting is of the utmost importance.

GNP Graystar's Green Silicon Carbide microgrits are used for wiresawing semiconductor materials, lapping, fine bonded and coated applications composites, refractory materials, precision ceramics, and other critical applications.

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