



GNP Graystar

Specialty Materials

TECHNICAL DATA SHEET

Green Silicon Carbide - Submicron Powder

Typical Chemical and Physical Analysis

		Limits
Silicon Dioxide (SiO ₂)	0.65%	0.80 %
Free Silicon (Si)	0.09 %	0.30 %
Free Carbon (C)	0.08 %	0.12 %
Total O ₂	0.60 %	0.85 %
Aluminum (Al)	< 100 ppm	
Sodium (Na)	< 200 ppm	
Magnesium (Mg)	< 100 ppm	
Calcium (Ca)	<300 ppm	
Titanium (Ti)	<100 ppm	
Iron (Fe)	< 150 ppm	
pH	4.5	5 +/- 1

PSD (Malvern)

Sizes	Specific Surface Area (BET)	d(10)	d(50)	d(90)
GS6.5	6.8 (+/- 0.5) m ² /g	0.40 +/- 0.06	1.35 +/- 0.10	3.3 +/- 0.30
GS9	9.0 (+/- 0.5) m ² /g	0.38 +/- 0.04	0.95 +/- 0.04	2.2 +/- 0.20
GS13	13.5 (+/-1.5) m ² /g	0.17 +/- 0.04	0.55 +/- 0.05	1.2 +/- 0.10
GS16.5	18.0 (+/-3.0) m ² /g	0.17 +/- 0.05	0.50 +/- 0.05	1.1 max
GS23.5	20.0 (+/-3.0) m ² /g	0.17 +/- 0.03	0.45 +/- 0.05	0.87 max

**proprietary blends are available to optimize desired shrinkage and/or density in sintered material.*

Description:

GNP Graystar's Submicron Green Silicon Carbide Powder are processed to specific surface areas and purities for technical and structural ceramics. The powders are produced to obtain optimum sinterability.

Applications:

GNP Graystar's Submicron Green Silicon Carbide Powders are used in technical ceramics such as armor, seals, and wear resistant components. They are also used where a fine powder application demands consistent particle size distribution and surface area.

info@GNPGraystar.com

Rev. 02/2020

Northern Office
37 John Glenn Dr.
Amherst, NY 14228
716.759.6600

www.GNPGraystar.com

Southern Office
9 Simmonsville Rd.
Bluffton, SC 29910
843.815.5600