

GRAYSTAR LLC

A Manufacturer and Distributor of
Abrasive Materials and Specialty Products

Headquarters
9 Simonsville Rd
PO Box 1670
Bluffton, SC 29910

Phone: 843-815-5600
Fax: 843-815-5601
www.graystarllc.com

Technical Data Sheet

Product: Green Silicon Carbide – Bonded Abrasives and General Industrial

Description: Green Silicon Carbide is produced in electrical internal resistance furnaces from very high purity silica sand and petroleum coke. Its combination of being very hard and sharp makes it a very aggressive abrasive ideal for many applications where a higher purity is required.

Applications: Green SiC is primarily for honing stones and grinding wheels, limited lapping and electrical applications. It is also used in various refractories.

Typical Chemical Analysis:

Silicon Carbide (SiC)	98.65%
Free Silicon (Si)	0.15%
Free Silica (SiO ₂)	0.63%
Iron (Fe)	0.08%
Free Carbon (C)	0.29%

Physical Characteristics:

Crystal Form:	Hexagonal (Alpha SiC)
True Density:	3.21 g/cm ³
Hardness:	Knoop (100) 2500 kg/mm, Mohs 9.2
Melting Point:	SiC does not melt but dissociates
Color:	Green

ANSI Test Methods:

Chemistry:	B74.15
Sizing:	B74.12
Bulk Density:	B74.4

Packaging & Shipping:

Warehousing in Bluffton, SC and Niagara Falls, NY
55 lb. paper bags
330 lb. fiber drums (grade sizes 8 – 240)
2200 lb. supersacks
Plastic pails, etc. for a surcharge (SC only)

Bulk Density (g/cm³):

Grit	BD	Grit	BD
8	call	60	1.49 - 1.59
10	call	70	1.47 - 1.57
12	call	80	1.48 - 1.56
14	call	90	1.43 - 1.53
16	1.39 – 1.49	100	1.40 - 1.52
20	1.40 – 1.50	120	1.42 - 1.52
24	1.43 - 1.53	150	1.37 - 1.47
30	1.45 - 1.55	180	1.34 - 1.44
36	1.46 - 1.56	220	1.29 - 1.39
46	1.47 - 1.55	240	record
54	1.49 - 1.59		

Certifications Available:

ANSI
FEPA
Agency and Mil-specs