



GRAFSTAR™ SF75 Graphite

Technical Data Sheet 5019

Product Overview

GRAFSTAR™ SF75 graphite is generally made according to the specific needs and dimensions of the customer. It has higher purity and the maximum level of some impurities can be guaranteed.

Applications

- Electrolysis
- Refractory production

Sizes*

- 150 x 300 to 600 x 600 mm rectangles
- 6" x 12" to 24" x 24" rectangles
- 200 to 300 mm diameter rounds
- 8" to 12" diameter rounds

Typical Properties at Room Temperature**

Characteristic	Unit	WG	AG	Unit	WG	AG	Unit	WG	AG
Density	lbs/ft ³	108		g/cm ³	1.73		g/cm ³	1.73	
Maximum Particle Size	inches	0.030		mm	0.76		mm	0.76	
Specific Resistance	10 ⁻⁴ Ωin	2.2	3.9	μΩm	5.5	10.0	μΩm	5.5	10.0
Flexural Strength	psi	2610	1450	kg/cm ²	183	102	MPa	18	10
Young's Modulus	10 ⁶ psi	1.88	0.87	kg/mm ²	1325	612	GPa	13.0	6.0
Tensile Strength	psi	2030	1015	kg/cm ²	143	71	MPa	14	7
Compressive Strength	psi	4639	4929	kg/cm ²	326	347	MPa	32	34
Permeability	Darcy	0.011	0.007	Darcy	0.011	0.007	Darcy	0.011	0.007
Hardness	Rockwell "R"	55		Rockwell "R"	55		Rockwell "R"	55	
C.T.E. (to 100 °C)	10 ⁻⁶ /°F	0.3	1.3	10 ⁻⁶ /°K	0.6	2.4	10 ⁻⁶ /°K	0.6	2.4
Thermal Conductivity	BTU-ft/hr ft ² °F	121	69	W/mK	210	120	W/mK	210	120
Ash Content	ppm	300		ppm	300		ppm	300	

Notes:

* Other sizes available upon request

** Properties listed are typical and cannot be used as accept/reject specifications

