



## Technical Data Sheet 5019

# SF75 Graphite

## 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 <sup>3</sup>	108		g/cm <sup>3</sup>	1.73		g/cm <sup>3</sup>	1.73	
Maximum Particle Size	inches	0.030		mm	0.76		mm	0.76	
Specific Resistance	10 <sup>-4</sup> Ωin	2.2	3.9	μΩm	5.5	10.0	μΩm	5.5	10.0
Flexural Strength	psi	2610	1450	kg/cm <sup>2</sup>	183	102	MPa	18	10
Young's Modulus	10 <sup>6</sup> psi	1.88	0.87	kg/mm <sup>2</sup>	1325	612	GPa	13.0	6.0
Tensile Strength	psi	2030	1015	kg/cm <sup>2</sup>	143	71	MPa	14	7
Compressive Strength	psi	4639	4929	kg/cm <sup>2</sup>	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 <sup>-6</sup> /°F	0.3	1.3	10 <sup>-6</sup> /°F	0.6	2.4	10 <sup>-6</sup> /°F	0.6	2.4
Thermal Conductivity	BTU-ft/hr ft <sup>2</sup> °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