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. Graphite grade SF75 is defined as a very low specific resistance material with very low coefficient of thermal expansion (C.T.E.) as well.

Applications
- Electrolysis applications
- Anode applications
- Refractory production

Sizes*

Standard Sizes	
English	**Metric**
6x12-to-24x24 in cross section rectangles	150x300-to-600x600 mm cross-section

Typical Properties at Room Temperature**

Characteristic	English Units	WG	AG	Metric Units	WG	AG	SI Units	WG	AG
Bulk Density	lbs/ft^3	108		g/cm^3	1.73		g/cm^3	1.73	
Maximum Particle Size	inches	0.03		mm	0.76		mm	0.76	
Specific Resistance	10^{-4} Ω-in	2.2	3.9	μΩm	5.6	9.9	μΩm	5.6	9.9
Flexural Strength	psi	2610	1450	kg/cm^2	183	102	MPa	18	10
Young's Modulus	10^6 psi	1.9	0.9	kg/mm^2	1321	611	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	346	MPa	32	34
Permeability	Darcy	0.01	0.01	Darcy	0.01	0.01	Darcy	0.01	0.01
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}/ °C	0.5	2.3	10^{-6}/ K	0.5	2.3
Thermal Conductivity	BTU/hr-ft-°F	121	69	W/m-K	209	119	W/m-K	209	119
Ash Content	%	0.03		%	0.03		%	0.03	

Notes:
* Other sizes available upon request
** Properties listed are typical and cannot be used as accept/reject specifications