

GRAFSTAR™ SF76 Grade Graphite

Technical Data Sheet

Product Overview

GRAFSTAR™ SF76 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
- Refractory production
 Anode applications

Sizes*

Standard Sizes						
English	Metric					
8-12 dia x 72 in rounds	200-to-300 mm dia x 1829 mm rounds					
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/ft³	111		g/cm³	1.78		g/cm³	1.78	
Maximum Particle Size	inches	0.03		mm	0.76		mm	0.76	
Specific Resistance	10 ⁻⁴ Ω-in	1.9	3.5	μΩm	4.8	8.9	μΩm	4.8	8.9
Flexural Strength	psi	2900	1700	kg/cm ²	204	119	MPa	20	12
Young's Modulus	10 ⁶ psi	2.0	0.9	kg/mm²	1405	611	GPa	13.8	6.0
Tensile Strength	psi	2292	1597	kg/cm ²	161	112	MPa	16	11
Compressive Strength	psi	5350	5350	kg/cm ²	376	376	MPa	37	37
Permeability	Darcy	0.004	0.004	Darcy	0.004	0.004	Darcy	0.004	0.004
Hardness	Rockwell "R"	62		Rockwell "R"	62		Rockwell "R"	62	
C.T.E. (to 100 °C)	10 ⁻⁶ / °F	0.33	1.4	10 ⁻⁶ / °C	0.6	2.5	10 ⁻⁶ / K	0.6	2.5
Thermal Conductivity	BTU/hr-ft-°F	133	75	W/m-K	230	130	W/m-K	230	130
Ash Content	%	0.03		%	0.03		%	0.03	



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^{*} Other sizes available upon request

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