



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/ft ³	111			g/cm ³	1.78			g/cm ³	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/mm ²	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		

Notes:

* Other sizes available upon request

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

