



GRAFSTAR™ CS-31 Grade Carbon

Technical Data Sheet 5083

Product Overview

GRAFSTAR™ CS-31 carbon is ideal for specific customer applications requiring very high hardness, high strength, and very low thermal conductivity.

Applications

- Anodes for electrolytic processes
- Applications that require low thermal conductivity material

Sizes

Shape	Measurement	Unit	Size	Unit	Size
Round	Diameter	in	3 - 30 x 72	mm	76 - 762 x 1830
Rectangle	Length	in	15 x 30 x 72	mm	380 x 762 x 1830
Rectangle	Length	in	17 x 17 x 72	mm	432 x 432 x 1830
Rectangle	Length	in	17 x 17 x 88	mm	432 x 432 x 2235
Rectangle	Length	in	20 x 20 x 72	mm	508 x 508 x 1830
Rectangle	Length	in	24 x 24 x 72	mm	610 x 610 x 1830

Typical Properties at Room Temperature*

Characteristic	Unit	WG		Unit	AG		Unit	WG		AG
Density	lbs/ft ³	101		g/cm ³	1.62		g/cm ³	1.62		
Maximum Particle Size	inches	0.030		mm	0.76		mm	0.76		
Specific Resistance	10 ⁻⁴ Ωin	16.5	19.7	μΩm	41.9	50.0	μΩm	41.9	50.0	
Flexural Strength	psi	2300		kg/cm ²	160		MPa	16		
Tensile Strength	psi	1700		kg/cm ²	120		MPa	12		
Compressive Strength	psi	5585		kg/cm ²	390		MPa	39		
Thermal Conductivity	BTU-ft/hr ft ² °F	6		W/mK	10		W/mK	10		
Ash Content	%	0.2		%	0.2		%	0.2		

Notes:

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

