

# GRAFTech International

## CS-31™ Graphite

GrafTech International is a global leader in graphite and carbon products. We enable customer leadership better and faster than our competition, through the creation, innovation and manufacture of carbon and graphite material science based solutions.

### Grade CS-31™ Carbon

Grade CS-31™ material is an extruded petroleum coke based baked carbon grade.

### Typical Applications

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

### Sizes

Inches	MM
3" – 30" x 72" diameter rounds	76-762 mm x 1829 mm diameter rounds
15" x 30" x 72"	381 x 762 x 1829 mm
17" x 17" x 72"	432 x 432 x 1829 mm
17" x 17" x 88"	432 x 432 x 2235 mm
19" x 19" x 72" rectangles	483 x 483 x 1829 mm rectangles
24" x 24" x 72" rectangles	610 x 610 x 1829 mm rectangles

### Typical Properties at Room Temperature

	<u>ENGLISH</u>	<u>WG</u>	<u>AG</u>	<u>METRIC</u>	<u>WG</u>	<u>AG</u>	<u>SI</u>	<u>WG</u>	<u>AG</u>
Density	lbs/ft <sup>3</sup>	101		g/cm <sup>3</sup>	1.62		g/cm <sup>3</sup>	1.62	
Maximum Particle Size	Inches	0.030		mm	0.76		mm	0.76	
Specific Resistance	10 <sup>-4</sup> Ω in.	16.5	19.7	μΩm	41.9	50.0	μΩm	41.9	50.0
Flexural Strength	psi	2300		kg/cm <sup>2</sup>	160		MPa	16	
Tensile Strength	psi	1700		kg/cm <sup>2</sup>	120		MPa	12	
Compressive Strength	psi	5585		kg/cm <sup>2</sup>	390		MPa	39	
Thermal Conductivity	BTU-ft/hr ft <sup>2</sup> °F	6		W/mK	10		W/mK	10	
Ash Content	ppm	0.2		ppm	0.2		ppm	0.2	

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