

# GRAF<sup>TM</sup>Tech International

## SLX<sup>TM</sup> 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 SLX<sup>TM</sup> Graphite

Grade SLX<sup>TM</sup> graphite is a medium grain graphite with high strength properties that excels in higher temperature applications.

### Typical Applications

- CZ silicon crystal growth
- Quartz processing
- Purified electronic fixturing
- Polysilicon seed chucks

### Sizes

22", 24" and 26" x 72" diameter rounds  
560, 600, 660 mm x 1800 mm rounds

*SLXW<sup>TM</sup> graphite is a post purified version of SLX<sup>TM</sup> graphite for applications requiring very low ash. SLXW<sup>TM</sup> graphite has the same properties as SLX<sup>TM</sup> graphite with an ash content of less than 20ppm.*

### Typical SLX<sup>TM</sup> Graphite 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>	112		g/cm <sup>3</sup>	1.80		g/cm <sup>3</sup>	1.80	
Maximum Particle Size	Inches	0.030		mm	0.76		mm	0.76	
Specific Resistance	10 <sup>-4</sup> Ω in.	2.8	3.0	μΩm	7.0	7.5	μΩm	7.0	7.5
Flexural Strength	psi	3580	2955	kg/cm <sup>2</sup>	252	208	MPa	29	20
Young's Modulus	10 <sup>6</sup> psi	1.59	1.35	kg/mm <sup>2</sup>	1121	949	GPa	11.0	9.3
Tensile Strength	psi	2700	2100	kg/cm <sup>2</sup>	190	148	MPa	19	15
Compressive Strength	psi	8300	8300	kg/cm <sup>2</sup>	595	595	MPa	59	59
Permeability	Darcy	0.005	0.005	Darcy	0.005	0.005	Darcy	0.005	0.005
Hardness	Rockwell "R"	95		Rockwell "R"	95		Rockwell "R"	95	
C.T.E. (to 100 °C)	10 <sup>-6</sup> /°F	1.7	2.0	10 <sup>-6</sup> /°K	3.0	3.7	10 <sup>-6</sup> /°K	3.0	3.7
Thermal Conductivity	BTU-ft/hr ft <sup>2</sup> °F	98	87	W/mK	170	150	W/mK	170	150
Ash Content	ppm	1500		ppm	1500		ppm	1500	

This information is based on data believed to be reliable but GrafTech makes no warranties, express or implied, as to its accuracy and assumes no liability arising out of its use. The data listed falls within the normal range of product properties but should not be used to establish specification limits or used alone as the basis of design. GrafTech's liability to purchasers is expressly limited to the terms and conditions of sale. SLX and SLXW are trademarks of GrafTech International Holdings Inc.

GT-5029  
Rev. 2

101 N. Philippe Pike, Clarksburg, WV 26323-0120  
Ph: +1-800-842-8805; +1-304-624-1253

La Lechere, 73264 Aigueblanche Cedex, France  
Ph: +33 04 79 41 45 00

Via Forno Allione, 2, I-25040 Malonno, Brescia, Italy  
Ph: +39 03 64 63 01 31

© 2009 GrafTech International Holdings Inc.

**GRAF<sup>TM</sup>Tech**  
International

[www.graftech.com](http://www.graftech.com)