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# SIGRAFINE® R6510

**Material:** Graphite  
**Forming:** Isostatically pressed  
**Application:** Semiconductor, photovoltaics

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**SIGRAFINE® is the new brand name** for our fine-grain graphites, previously known under the names RINGSORFF®, SIGRAFORM®, SIGRAGENT® and CRYSTA-SIL®.

## Material data of SIGRAFINE® R6510

Typical properties	Units	Test standards	Values*
Average grain size	µm	ISO 13320	10
Bulk density	g/cm <sup>3</sup>	DIN IEC 60413/204	1.83
Open porosity	Vol. %	DIN 66133	10
Medium pore entrance diameter	µm	DIN 66133	1.8
Coefficient of permeability (ambient temperature)	cm <sup>2</sup> /s	DIN 51935	0.06
Rockwell hardness HR <sub>5/100</sub>		DIN IEC 60413/303	90
Resistivity	µΩm	DIN IEC 60413/402	13
Flexural strength	MPa	DIN IEC 60413/501	60
Compressive strength	MPa	DIN 51910	130
Dynamic modulus of elasticity	MPa	DIN 51915	11.5 x 10 <sup>3</sup>
Thermal expansion (20 – 200 °C)	K <sup>-1</sup>	DIN 51909	4.2 x 10 <sup>-6</sup>
Thermal conductivity (20 °C)	Wm <sup>-1</sup> K <sup>-1</sup>	DIN 51908	105
Ash content	ppm	DIN 51903	**

\* Value might be changed due to material size

\*\* Ash value according to purity specifications

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This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should therefore not be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our "General Conditions of Sale".

### Graphite Materials & Systems | SGL CARBON GmbH

Sales Europe/Middle East/Africa | [iso-europe@sglgroup.com](mailto:iso-europe@sglgroup.com)

Sales Americas | [iso-americas@sglgroup.com](mailto:iso-americas@sglgroup.com)

Sales Asia/Pacific | [iso-asia@sglgroup.com](mailto:iso-asia@sglgroup.com)

[www.fine-grain-graphite.com](http://www.fine-grain-graphite.com) | [www.sglgroup.com/gms](http://www.sglgroup.com/gms)



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