

SIGRAFINE® R8500

Material: Graphite Forming: Isostatically pressed Application: EDM

Material data of SIGRAFINE® R8500

Typical properties	Units	Test standards	Values*
Average grain size	μm	ISO 13320	10
Bulk density	g/cm³	DIN IEC 60413/204	1.77
Open porosity	Vol. %	DIN 66133	14
Medium pore entrance diameter	μm	DIN 66133	1.8
Coefficient of permeability (ambient temperature)	cm²/s	DIN 51935	0.25
Rockwell hardness HR 5/100		DIN IEC 60413/303	70
Resistivity	μΩm	DIN IEC 60413/402	14
Flexural strength	MPa	DIN IEC 60413/501	50
Compressive strength	MPa	DIN 51910	110
Dynamic modulus of elasticity	MPa	DIN 51915	10.5 x 10 ³
Thermal expansion (20 – 200 °C)	K-1	DIN 51909	4.2 x 10 ⁻⁶
Thermal conductivity (20 °C)	Wm ⁻¹ K ⁻¹	DIN 51908	95
Ash content	ppm	DIN 51903	200

* Typical average values of different rectangular and round block sizes. The actual individual block values might vary depending on dimension and format. For any engineering/design purposes please always contact our technical sales team.



Graphite Materials & Systems | SGL CARBON GmbH

Sales Europe/Middle East/Africa | gms-europe@sglcarbon.com Sales Americas | gms-americas@sglcarbon.com Sales Asia/Pacific | gms-asia@sglcarbon.com www.fine-grain-graphite.com | www.sglcarbon.com TDS R8500.00 04 2019/0 E Printed in Germany ®registered trademarks of SGL Carbon SE

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