

FRATHERNIT[®] SG

Product description	Engineered composite material made of resin-bound mica		
Standard colour	grey/silver		
Main applications	Pressure resistant insulation material for tool- and mouldindustry.		
	Used for hot-runner insulation.		
Delivery program	Sheets, panels and highly precise machined parts and finished components		

Physical characteristics

Properties	Test Standard	Unit	Typical value
Specific density	ISO 1183	g/cm ³	2,1
Water absorption	ISO 62	%	1,0

Thermal characteristics

Properties	Test Standard	Unit	Typical value
Operating temperature, continuous	-	٦°	550
Operation temperature, short-term	-	٦°	700
Coeff. of linear thermal expansion (\parallel/\perp)	DIN 51045	10 ⁻⁶ x K ⁻¹	10/100
Thermal conductivity	DIN 52612	W/mK	0,26

Mechanical characteristics

Properties	Test Standard	Unit	Typical value
Compressive strength at 23 °C	ISO 604	N/mm ²	410
Compressive strength at 280 °C	ISO 604	N/mm ²	250
Flexural strength at 23 °C	ISO 178	N/mm ²	150

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The standard values shown in this data sheet are measured by standard test methodes. Depending on operation terms and dimensions the material properties can differ from these values.

Please contact our applications and sales engineers to clarify the suitability of the material for your application.