

DOTEC® 500M

Product description	Engineered composite material made of glass bound mica
Standard colour	brown/grey
Main applications	Electrical and thermal insulation parts for machine engineering and process industry
	(vacuum tight, chemical and water resistant)
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/cm³	2,5
Water absorption	ISO 62	%	0,0

Thermal characteristics

Properties	Test Standard	Unit	Typical value
Operating temperature, continuous	_	°C	500
Coeff. of linear thermal expansion	DIN 51045	10 ⁻⁶ x K ⁻¹	11
Thermal conductivity	DIN 52612	W/mK	0,87

Mechanical characteristics

Properties	Test Standard	Unit	Typical value
Compressive strength at 23 °C	ISO 604	N/mm ²	310
Flexural strength at 23 °C	ISO 178	N/mm ²	85

Electrical characteristics

Properties	Test Standard	Unit	Typical value
Comparative tracking index	IEC 112	_	CTI 600
Permittivity	DIN 53483	_	6,7
Electric strength	IEC 243-1	KV/3 mm	86,1
Arc resistance	VDE0303 Part 71	Seconds	245

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We reserve the right to make changes in the context of further technical developments. The guide values listed in this data sheet are not contractual data.

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