

## OVERVIEW TECHNICAL DATA

# DOTEC<sup>®</sup> 1000 S

<b>Product description</b>	Engineered composite material made of chemical reacted ceramic
<b>Standard colour</b>	grey
<b>Main applications</b>	Electrical and thermal insulation parts for machine engineering and process industry
<b>Delivery program</b>	Sheets, panels and highly precise machined parts and finished components

## Physical characteristics

Properties	Test Standard	Unit	Typical value
Specific density	ISO 1183	g/cm <sup>3</sup>	2,25
Water absorption	ISO 62	%	5,0

## Thermal characteristics

Properties	Test Standard	Unit	Typical value
Operating temperature, continuous	-	°C	1000
Coeff. of linear thermal expansion	DIN 51045	10 <sup>-6</sup> x K <sup>-1</sup>	5,6
Shrinkage at operating temperature	after 12 h	%	0,2
Thermal conductivity	DIN 52612	W/mK	0,69

## Mechanical characteristics

Properties	Test Standard	Unit	Typical value
Compressive strength at 23 °C	ISO 604	N/mm <sup>2</sup>	70
Flexural strength at 100 °C	ISO 178	N/mm <sup>2</sup>	40

## Electrical characteristics

Properties	Test Standard	Unit	Typical value
Electric strength	IEC 243-1	KV/3 mm	8,4
Arc resistance	VDE0303 Part 71	Seconds	> 600

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The standard values shown in this data sheet are measured by standard test methods. 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.