OVERVIEW TECHNICAL DATA

ELTIMID® HP 15G

Material description	High-temperature polyimide, with Graphit (15%)
Colour	dark grey
Application	Thermal insulation parts for machine engineering and process industry
Available as	blanks, rods and components as per drawing

Mechanical and physical properties

Properties	Test method/standard	Unit	Value
Tensile strength	DIN EN ISO 527	MPa	103
Tensile modulus		MPa	3998
Flexural strength	DIN EN ISO 178	MPa	152
Flexural strain		%	5,3
Flexural modulus		MPa	3754
Compressive strength	DIN EN ISO 604	MPa	269
Compressive stress at 10 % compression		MPa	155
Compressive modulus		MPa	1878
Shore hardness	EN ISO 868	Shore D	87
Specific density	-	g/cm^3	1,46
Water absorption 24 h at 80 °C 48 h at 80 °C	DIN EN ISO 62	%	 1,7 2,2

Thermal properties

Properties	Test method/standard	Unit	Value
Long-term service temperature	-	°C	280
Short-term service temperature < 3h < 1h (under minimal load)	-	°C	 400 450
Specific heat capacity	DSC	J/g x K	1,046
Thermal conductivity	DSC	W/m x K	0,22

Electrical characteristics

Properties	Test method/standard	Unit	Value
Dielectric constant 1 kHz 10 kHz 100 kHz	IEC 60250	-	 4,2 4,1 4,1
Dielectric dissipation factor 1 kHz 10 kHz 100 kHz		-	 1,5 x 10^{-3} 3,1 x 10^{-3} 6,8 x 10^{-3}
Surface resistivity	DIN IEC 93	Ω	2,3 x 10^{14}
Volume resistivity		Ωm	4,2 x 10^{12}
Electric strength	DIN IEC 60243-1	kV/mm	17,3
Flammability rating	UL 94	-	V0

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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.