

## OVERVIEW TECHNICAL DATA

# DoglideEltimid® HP

<b>Material description</b>	High-temperature polyimide, natural
<b>Colour</b>	reddish brown
<b>Application</b>	Electrical and thermal insulation parts for machine engineering and process industry
<b>Available as</b>	blanks, rods and components as per drawing

## ➔ Mechanical and physical properties

Properties	Test method/standard	Unit	Value
Tensile strength	DIN EN ISO 527	MPa	140
Tensile modulus		MPa	3581
Flexural strength	DIN EN ISO 178	MPa	188
Flexural strain		%	11,1
Flexural modulus		MPa	3705
Compressive strength	DIN EN ISO 604	MPa	470
Compressive stress at 10 % compression		MPa	165
Compressive modulus		MPa	1960
Shore hardness	EN ISO 868	Shore D	90
Specific density	-	g/cm <sup>3</sup>	1,38
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	0,925
Thermal conductivity	DSC	W/m x K	0,22
Glass transition temperature T <sub>g</sub> (tan delta <sub>max</sub> )	DTMA	°C	361

## ➔ Electrical properties

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 <sup>-3</sup> 3,1 x 10 <sup>-3</sup> 6,8 x 10 <sup>-3</sup>
Surface resistivity		DIN IEC 93	Ω
Volume resistivity	Ωm		8 x 10 <sup>13</sup>
Electric strength	DIN IEC 60243-1	kV/mm	21,8
Flammability rating	UL 94	-	V0

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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.