PAI Torlon 4301, with graphite and PTFE

Mechanical properties	Test method	Test environment	Unit	Value
Tensile strength	ISO 527	break, 23 °C	MPa	80
Tensile strain	ISO 527	break, 23 °C	%	5
Tensile modulus	ISO 527	-	GPa	5,8
Compression strength	ISO 604	1% deformation	MPa	31
Compression strength	ISO 604	2% deformation	MPa	58
Impact strength	ISO 179	Charpy, notched	kJ/m^2	4
Hardness	ISO 2039	-	MPa	200
Hardness	ISO 2039	Rockwell	-	M105
Coefficient of friction	- -	static	-	0,06-0,11
Coefficient of friction	- -	dynamic	-	0,12-0,19

Thermal properties	Test method	Test environment	Unit	Value
Service temperature	- -	short term	°C	270
Service temperature	- -	continuous	°C	250
Glass transition temperature	- -	-	°C	280
Heat distortion temperature	ISO 75	1,82 MPa	°C	280
Coefficient of linear thermal expansion	- -	23-100 °C	$10^{-5}\,K^{-1}$	2,5
Coefficient of linear thermal expansion	- -	23-150 °C	$10^{-5}\,K^{-1}$	2,5
Coefficient of linear thermal expansion	- -	>150 °C	$10^{-5}\,K^{-1}$	2,5
Thermal conductivity	- -	23 °C	W/m,K	0,54

Electrical properties	Test method	Test environment	Unit	Value
Dielectric constant	IEC 60250	ε, 100 Hz	-	6,0
Dielectric constant	IEC 60250	ε, 1 MHz	-	5,4
Loss factor	IEC 60250	tan δ, 100 Hz	-	0,037
Loss factor	IEC 60250	tan δ, 1 MHz	-	0,042
Volume resistivity	IEC 60093	-	ohm cm	$>10^{13}$
Surface resistivity	IEC 60093	-	ohm	$>10^{13}$

Other properties	Test method	Test environment	Unit	Value
Density	ISO 1183	-	g/cm^3	1,45
Water absorption	- -	saturation, immersion, 23 °C	%	3,8
Water absorption	- -	immersion, 24 h, 23 °C	%	0,30
Water absorption	- -	equilibrium, 23 °C, RH 50%	%	1,9
Oxygen index	ISO 4589	-	%	44
Flammability	UL 94	1,5 mm	-	V0
Flammability	UL 94	3 mm	-	V0

The data presented are taken from our suppliers and respresent our best knowledge. The values are given in good faith. They should not constitute the basis for calculations, construction etc. The responsibility for veryfing material data rests with the end-user.