

## PTFE

### Technical Information:

Information to be used as a guide only. It corresponds with our current knowledge and indicates possible applications. We cannot guarantee suitability for a specific application. Unless otherwise stated these values represent averages taken from injection moulded samples.

Properties	Unit	Test Method DIN ASTM	Result
<b>MECHANICAL</b>	-	-	-
Density	g/cm <sup>3</sup>	53479	2.18
Tensile strength at yield	MPa	53455	25
Tensile strength at break	MPa	53455	-
Elongation at Break	%	53455	500
Modulus of elasticity in tension	MPa	53457	700
Modulus of elasticity in flexure	MPa	53457	-
Ball indentation hardness	MPa	53456	30
Impact strength (Charpy)	KJ/m <sup>2</sup>	53453	o.Br
Creep rupture strength after 1000 hours with static load	MPa	-	5
Time yield limit for 1% elongation after 1000 hours	MPa	-	1.5
Coefficient of friction against hardened and ground steel p+0,05 N/mm <sup>2</sup> , v=0,6 m/s	-	-	0.08-1
Wear conditions as above	µm/km	-	21
<b>THERMAL</b>	-	-	-
Crystalline melting point	°C	53736	327
Glass transition temperature	°C	53736	-20
Heat distortion temperature method A	°C	ISO 75	5.5
Heat distortion temperature method B	°C	ISO 75	121
Max. service temperature short term	°C	-	260
Max. service temperature long term	°C	-	260
Coefficient of thermal conductivity	W/(m K)	-	0.25
Specific heat	J/(g K)	-	1
Coefficient of thermal expansion	10-5/K	-	12
<b>ELECTRICAL</b>	-	-	-
Dielectric constant at 10 (5) Hz	-	53483	2.1
Dielectric loss factor at 10(5) Hz	-	53483	0.0002
Specific Volume Resistance	Ωcm	53482	10 (18)
Surface Resistance	Ω	53482	
Dielectric strength 1mm	kV/mm	53481	48
Tracking resistance	-	53480	KA 3c/KB 300

<b>MISCELLANEOUS</b>	-	-	-
Moisture Absorption: Equilibrium in standard atmosphere (23°C / 50% relative humidity)	%	53714	0
Water absorption at saturation at 23°C	%	53495	-
Resistance to hot water, washing soda	-	-	resistance
Flamability	-	UL 94	VO
Resistance to weathering	-	-	resistant

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