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Technical datasheet

PTFE (Polytetrafluoroethylene) with 25% carbon fibre

Example of application
› sliding components, seals, linings

Advantages	Disadvantages
› excellent anti-friction properties › very high temperature resistance › excellent chemical resistance › very low strain	› low mechanical properties

Basic information	Specification
Format	**round material:** 10 mm up to 100 mm available in 2 m length **sheets:** 2 mm up to 20 mm available in 1.2 m x 1.2 m

Physical properties	Standard term/Specification*	Unit	Testing method
Density	2.11	g/cm^3	DIN 53479
Moisture ingress	n.sp.	%	DIN EN ISO 62

Mechanical properties	Standard term/Specification*		Unit	Testing method
	pressed	extruded		
Tensile strength	12-19	10-15	N/mm^2	DIN 53455
Elongation at break	130-190	90-140	%	DIN 53455
E-Module	n.sp.		MPa	DIN EN ISO 527
Notch toughness	83		J/m^2	ASTM D256
Rochwellhardness	60-68			DIN 53505

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	0.58	W/(m·K)	DIN 52612
Linear thermal expansion coefficient based on a fixed initial length	0.95	$K^{-1} \cdot 10^{-4}$	DIN 53752
	1.9	mm	At initial length of 1.000 mm and a temperature difference of 20 °C.
Max. operating temperature, long-term	260	°C	
Max. operating temperature, short-term	n.sp.	°C	
Min. operating temperature, long-term	n.sp.	°C	

Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	10^3	Ω·cm	DIN 53482
Outer surface coefficient	10^3	Ω	DIN 53482
Puncture resistance	n.sp.	kV/mm	DIN EN 60243

Legend
n.sp. = not specified

Should you require binding and exact values, please ask for the appropriate factory certificate. This may incur additional costs. Please note that all specifications are standard values only, which are subject to production-related fluctuations.
*Higher specification on request.

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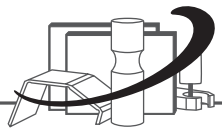

technical plastics

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