

TECAFINE PE500 black - Stock Shapes (rods, plates, tubes)

Chemical Designation Main features PE-HMW (Polyethylene - high molecular high molecular weight weight) → good UV and weather resistance → good wear resistance Colour → good slide and wear properties black opaque → good impact strength Density → anti adhesive 0.95 g/cm³ → average molecular weight 500.000 g/mol Mechanical properties parameter value unit norm Modulus of elasticity 1100 MDa

Modulus of elasticity (tensile test)		1100	MPa	DIN EN ISO 527-1		(1) n.b. = not broken	
Tensile strength at yield		28	MPa	DIN EN ISO 527-1			
Elongation at yield (tensile test)		8	%	DIN EN ISO 527-1			
Impact strength (Charpy)		n.b.	kJ/m ²	DIN EN ISO 179-1	1)		
Shore hardness	Shore D	66	-	DIN EN ISO 868			
Thermal properties	parameter	value	unit	norm		comment	
Service temperature		-100 - +80	°C	-	1)	(1) Found in public sources.	
Thermal expansion (CLTE)		18	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	;2	Individual testing regarding application conditions is mandatory.	

Electrical properties	parameter	value	unit	norm		comment
surface resistivity		≥ 10 ¹⁴	Ω	-		
Dielectric strength		44	kV/mm	ISO 60243-1		•
Other properties	parameter	value	unit	norm		comment
Flammability	corresponding to	B2		DIN 4102	1)	(1) Corresponding means no listing. The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.

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Target Industries

→ food technology

→ mining industry

construction industry

comment

Version: AA