

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

Chemical Designation

PE-HMW (Polyethylene - high molecular weight)

Colour

white opaque

Density

0.95 g/cm³

Main features

- high molecular weight
- good slide and wear properties
- good wear resistance
- good impact strength
- anti adhesive
- average molecular weight 500.000 g/mol

Target Industries

- construction industry
- food technology
- mining industry

Mechanical properties	parameter	value	unit	norm	comment
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)
Thermal expansion (CLTE)		18	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	(1) Found in public sources. 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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