

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

Chemical Designation

PE-HMW (Polyethylene - high molecular weight)

Colour

red opaque

Density

0.95 g/cm³

Main features

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

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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Manufactured by: Ensinger Group,
a German based plastic manufacturer

63 Hillview Avenue #02-03
Lam Soon Industrial Building
Singapore 669569
Tel +65 65524177
Fax +65 65525177
www.ensingerplastics.com/en-sg/

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Ensinger Asia Holding Pte Ltd.
(Singapore Branch)
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