TECAFINE PP grey - Stock Shapes (rods, plates, tubes)

Chemical Designation
PP (Polypropylene)

Colour
grey opaque

Density
0.91 g/cm^3

Main features
- excellent chemical resistance
- excellent stiffness
- heat stabilized
- very good weldable

Target Industries
- pharmaceutical industry
- chemical technology
- agricultural machinery
- construction industry
- food engineering
- power engineering

Mechanical properties	parameter	value	unit	norm		comment
Modulus of elasticity (tensile test)		1700	MPa	DIN EN ISO 527-1		(1) n.b. = not broken
Tensile strength at yield		33	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)	
Ball indentation hardness		70	MPa	ISO 2039-1		
Shore hardness	Shore D	72		DIN EN ISO 868		

Thermal properties	parameter	value	unit	norm		comment
Service temperature		+0 - +100	°C	-	1)	(1) Found in public sources. Individual testing regarding application conditions is mandatory.
Thermal expansion (CLTE)		16	10^{-5} K^{-1}	DIN EN ISO 11359-1;2		

Electrical properties	parameter	value	unit	norm	comment
surface resistivity		10^{14}	Ω	-	
Dielectric strength		52	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.

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values that can be used primarily for comparison purposes for material selection. These values are within the normal tolerance range of product properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. As the properties depend on the dimensions of the semi-finished products and the orientation in the component (esp. in reinforced grades), the material may not be used without a separate testing under individual circumstances. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com. Technical changes reserved.

Ensinger GmbH
Rudolf-Diesel Str. 8
71154 Nufringen - Deutschland

Tel +49 7032 819 0
Fax +49 7032 819 100
ensingerplastics.com

Date: 2017/11/23

Version: AA