

Material data sheet PP natural

Chemical Designation: Polypropylene

DIN-abbreviation: PF

Colour / Fillers: white opaque Density: 0,9 g/cm³

Main features

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

Target Industries

- agricultural machinery
- chemical technology
- food engineering
- pharmaceutical industry

Characteristics

mechanical properties	parameter	value	unit	norm	comment
Modulus of elasticity (tensile test)		1400	MPa	DIN EN ISO 527-1	1) n.b.= not broken
Tensile strength at yield		32	MPa	DIN EN ISO 527-1	
Elongation at yield		8	%	DIN EN ISO 527-1	
Impact strength (Charpy)		n. b.	kJ/m²	DIN EN ISO 527-1 1)	
Ball indentation hardness		70	MPa	ISO 2039-1	
Shore hardness	Shore D	70		DIN EN ISO 868	

thermal properties	parameter	value	unit	norm	comment
Service temperature		+0 - +100	°C	1)	Found in public sources. Individual
Thermal expansion (CLTE)		12	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	testing regarding application conditions is mandatory.



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electrical properties	parameter	value	unit	norm	comment
surface resistivity		10 ¹⁴	Ω	DIN IEC 60093	
Dielectric strength		58	kV/mm	ISO 60243-1	

other properties	parameter	value	unit	norm	comment
Flammability	corresponding to	B2		DIN 4102 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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Date: 2017/11/23

