

Niplene F50 AGR

Polypropilene homopolymer reinforced with 50% of glass fibres, with chemical bond between fibres and the polymeric matrix, for the moulding of items that needs an exceptional stiffness.

	Properties	Test condition	Method	Unit	Value
Rheological	Melt Flow Index	230 °C / 2,16 Kg	ASTM D1238	g/10min	2,5
Mechanical	Tensile Stress at Break	5 mm/min	ASTM D638	MPa	110
	Flexural Maximum Stress	1,3 mm/min	ASTM D790	MPa	180
	Flexural Elastic Modulus	1,3 mm/min	ASTM D790	MPa	10500
	Izod Notched Impact Strength	23°C/3mm	ASTM D256	J/m	130
	Izod Notched Impact Strength	-20°C/3mm	ASTM D256	J/m	90
	Rockwell Hardness		ASTM D785	R-scale	115
	Elongation	50 mm/min	ASTM D638	%	2,5
Thermal	Vicat Softening Temperature	49N / 120°C/h	ASTM D 1525	°C	146
	Heat Distortion Temperature H.D.T	1.82 MPa	ASTM D648	°C	158
	Linear Expansion Coefficient	23°C/55°C	ISO 11359-2	10 ⁻⁵ K ⁻¹	3
Flame Behaviour	Glow Wire Temperature (G.W.T)	S=2.0 mm	IEC 695-2-1	°C	650
	UL 94 Rating	S=1.6 mm	UL 94	class	HB
	UL 94 Rating	S=3.2 mm	UL 94	class	HB
Electrical	Relative Permittivity	1 Mhz - dry	IEC 60250	-	2,7
	Dissipation Factor	1 Mhz - dry	IEC 60250	-	0,001
	Dielectric Strength	S=1 mm	IEC 60243-1	KV/mm	60
	Surface Resistivity	dry	IEC 60093	Ω	10 ¹⁴
	Volume Resistivity	dry	IEC 60093	Ω cm	10 ¹⁵
Various	Density		ASTM D792	g/cm ³	1,33



Properties	Test condition	Method	Unit	Value
				0,1
Moulding Shrinkage	parallel	-	%	0,2-0,4
Moulding Shrinkage	transversal	-	%	0,3-0,6

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