

Niplene F40 AGR

Polypropylene homopolymer, reinforced with 40% glass fibre chemically coupled to the polymeric matrix

	Properties	Test condition	Method	Unit	Value
Rheological	Melt Flow Index	230 °C / 2,16 Kg	ASTM D1238	g/10min	3
Mechanical	Rockwell Hardness		ASTM D785	R-scale	115
	Tensile Modulus	5 mm/min	ISO 527-1/-2	MPa	9200
	Tensile Stress at Break	5 mm/min	ISO 527-1/-2	MPa	98
	Elongation	5 mm/min	ISO 527-1/-2	%	3
	Flexural Maximum Stress	1,3 mm/min	ISO 178	MPa	150
	Flexural Elastic Modulus	1,3 mm/min	ISO 178	MPa	7600
	Izod Notched Impact Strength	23°C	ISO 180/A	KJ/m ²	12
	Izod Notched Impact Strength	-20°C	ISO 180/A	-	8,5
	Tensile Stress at Break	5 mm/min	ASTM D638	MPa	105
		Thermal	Linear Expansion Coefficient	23°C/55°C	ISO 11359-2
Vicat Softening Temperature (unannealed)		B/50	ISO 306	°C	138
Heat Distortion Temperature (unannealed)		A - 1.80 MPa	ISO 75A-1/-2	°C	150
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	1Mhz - dry	IEC 60250	-	2,7
	Dissipation Factor	1Mhz - dry	IEC 60250	-	0,001

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					60
	Surface Resistivity	dry	IEC 60093	Ω	10 ¹⁴
	Volume Resistivity	dry	IEC 60093	Ω cm	10 ¹⁵
Various	Humidity Content at Equilibrium	23°C / 50 % U.R.	ISO 62	%	0,1
	Moulding Shrinkage	parallel	-	%	0,15-0,55
	Moulding Shrinkage	transversal	-	%	0,25-0,75
	Density		ISO 1183	g/cm ³	1,22