

Nipene F20 AGR

Polypropylene homopolymer, reinforced with 20% 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	4,5
Mechanical	Tensile Stress at Break	5 mm/min	ASTM D638	MPa	80
	Flexural Maximum Stress	1,3 mm/min	ASTM D790	MPa	110
	Flexural Elastic Modulus	1,3 mm/min	ASTM D790	MPa	4500
	Rockwell Hardness		ASTM D785	R-scale	113
	Izod Notched Impact Strength	23°C/3,2 mm	ASTM D256	J/m	110
	Izod Notched Impact Strength	-20°C/3,2 mm	ASTM D256	J/m	70
	Elongation	50 mm/min	ASTM D638	%	3,5
Thermal	Vicat Softening Temperature	49N / 120°C/h	ASTM D 1525	°C	138
	Heat Distortion Temperature H.D.T	1.82 MPa	ASTM D648	°C	152
	Linear Expansion Co-efficient	23°C/55°C	ISO 11359-2	10 ⁻⁵ K ⁻¹	4
	Glow Wire Temperature (G.W.T)	S=2.0 mm	IEC 695-2-12	°C	650
Flame Behaviour	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
	Dielectric Strength	S=1 mm	IEC 60243-1	KV/mm	60
	Surface Resistivity	dry	IEC 60093	□	10 ¹⁴
	Volume Resistivity	dry	IEC 60093	□ □ cm	10 ¹⁵

	Properties	Test condition	Method	Unit	Value
					1,05
	Humidity Content at Equilibrium	23°C / 50 % U.R.	ISO 62	%	0,2
	Moulding Shrinkage	parallel	-	%	0,3-0,7
	Moulding Shrinkage	transversal	-	%	0,4-1,0