

NIPLENE F10 AGR

- Polypropylene homopolymer, reinforced with 10 % glass fiber chemically bounded. Heat stabilized.
- Grade developed for injection moulding, characterized by a good balance impact/elastic modulus.

	Properties	Test condition	Method	Unit	Value
Rheological	Melt Flow Index	230 °C / 2,16 Kg	ASTM D1238	g/10min	10
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
Various	Density		ASTM D792	g/cm ³	0,97
	Humidity Content at Equilibrium	23°C / 50 % U.R.	ISO 62	%	0,2
	Moulding Shrinkage	parallel	-	%	0,4-0,8
	Moulding Shrinkage	transversal	-	%	0,5-1,0
Thermal	Vicat Softening Temperature	49N / 120°C/h	ASTM D 1525	°C	120
	Heat Distortion Temperature H.D.T	1.82 MPa	ASTM D648	°C	140
	Linear Expansion Coefficient	23°C/55°C	ISO 11359-2	10 ⁻⁵ K ⁻¹	4
Mechanical	Flexural Maximum Stress	1,3 mm/min	ASTM D790	MPa	80
	Flexural Elastic Modulus	1,3 mm/min	ASTM D790	MPa	2600
	Izod Notched Impact Strength	23°C/3mm	ASTM D256	J/m	75
	Rockwell Hardness		ASTM D785	R-scale	110
	Elongation	50 mm/min	ASTM D638	%	4,5
	Tensile Modulus	5 mm/min	ASTM D638	MPa	3150
	Tensile Stress at Break	5 mm/min	ASTM D638	MPa	52
	Relative Permittivity	1 Mhz – dry	IEC 60250	-	2,7
Dissipation Factor	1 Mhz – dry	IEC 60250	-	0,001	



Electrical

Dielectric Strength	S=1 mm	IEC 60243-1	KV/mm	60
Surface Resistivity	dry	IEC 60093	Ω	10^{14}
Volume Resistivity	dry	IEC 60093	$\Omega \cdot \text{cm}$	10^{15}

TEKUMA KUNSTSTOFF GMBH