

B100F40-F1

B100F40-F1 is a chopped fiber glass mat reinforced PP laminate with randomly oriented glass fibers. This product provides good flow properties, a very homogeneous fiber distribution and higher heat stabilization. It is commonly used for semi-structural applications, like front-end, backrest, battery trays.

Properties	Standard	SI Units		Engl. Units		
Physical Properties						
Laminate Thickness*	Internal	3.8	mm	0.150	in	
Area Weight*	Internal	4522	g/m ²	0.926	lb/ft ²	
Fiber Content**	ISO 1172 / PA_73, 78	38	%	38	%	
Density (Laminate)*	ISO 1183 / PA_137	1.19	g/cm ³	0.0430	lb/in ³	
Density (Molded)**	ISO 1183 / PA_138	1.20	g/cm ³	0.0434	lb/in ³	
Mechanical Properties^{3)**}						
Tensile Strength	ISO 527 / PA_098	95	MPa	13780	psi	
Tensile Elongation at Break	ISO 527 / PA_098	2.5	%	2.5	%	
Tensile Modulus	ISO 527 / PA_098	5300	MPa	769	ksi	
Flexural Strength	ISO 178 / PA_100	150	MPa	21758	psi	
Flexural Modulus	ISO 178 / PA_100	5000	MPa	725	ksi	
Impact Strength -	IZOD (3.2 mm)	ASTM D256 E	600	J/m	11.24	ft*lb(wt)/in
	Charpy (4.0 mm)	ISO 179-1/2fn / PA_97	90	kJ/m ²	43	ft*lb/in ²
Multiaxial Impact (4.0 mm)						
Max. Load	ASTM D-3763	3731	N	839	lb(wt)	
Energy @ Max. Load		17	J	13	ft*lb	
Energy @ Failure		28	J	21	ft*lb	
Max. Load	ISO 6603-2 PA_406	5337	N	1200	lb(wt)	
Energy @ Max. Load		19	J	14	ft*lb	
Energy @ Failure		43	J	32	ft*lb	
Processing Properties**						
Molding Shrinkage	ISO 2577	0.2-0.3	%	0.2-0.3	%	
Special Properties**						
Heat Deflection Temperature	ISO 75-2 / PA_350	155	°C	311	°F	
Coefficient of Thermal Expansion	EN ISO 11403-2	15-25	10 ⁻⁶ /K	15-25	10 ⁻⁶ /K	
Burning Rate	ISO 3795 / FMVSS302	4 - 5	mm/min	0.16 -0.20	in/min	

1) = measured in longitudinal direction

2) = measured in transverse direction

3) = crosswise molded

4) = lengthwise molded

* = Property was determined on the laminate

** = Property was determined on flat molded plaques

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