

G100F40-F6

G100F40-F6 is a endless fiber glass mat reinforced PP laminate with randomly oriented glass fibers. This product provides good flow properties and low warp age tendency. It is commonly used for large semi-structural applications, like front-end, backrest.

Properties	Standard	SI Units		Engl. Units		
<u>Physical Properties</u>						
Laminate Thickness*	Internal	3.8	mm	0.150	in	
Area Weight*	Internal	4.6	kg/m ²	0.942	lb/ft ²	
Fiber Content**	ISO 1172 / PA_73, 78	40	%	40	%	
Density (Laminate)*	ISO 1183 / PA_137	1.21	g/cm ³	0.0437	lb/in ³	
Density (Molded)**	ISO 1183 / PA_138	1.24	g/cm ³	0.0448	lb/in ³	
<u>Mechanical Properties</u> ^{3**}						
Tensile Strength	ISO 527 / PA_098	110	MPa	15956	psi	
Tensile Elongation at Break	ISO 527 / PA_098	2.35	%	2.35	%	
Tensile Modulus	ISO 527 / PA_098	6400	MPa	928	ksi	
Flexural Strength	ISO 178 / PA_100	165	MPa	23933	psi	
Flexural Modulus	ISO 178 / PA_100	5900	MPa	856	ksi	
Impact Strength -	IZOD (4.0mm)	ISO 180/A	85	kJ/m ²	40	ft*lb/in ²
	IZOD (3.2mm)	ASTM D256 E	900	J/m	16.86	ft*lb(wt)/in
	Charpy (4.0mm)	ISO 179-1/2fn / PA_97	100	kJ/m ²	48	ft*lb/in ²
Multiaxial Impact (4.0mm)						
Max. Load	ASTM D-3763		N		lb(wt)	
Energy @ Max. Load			J		ft*lb	
Energy @ Failure			J		ft*lb	
Max. Load	ISO 6603-2/ PA_406	7000	N	1574	lb(wt)	
Energy @ Max. Load		19	J	14	ft*lb	
Energy @ Failure		39	J	29	ft*lb	
<u>Processing Properties</u> **						
Molding Shrinkage	ISO 2577	0.15 - 0.25	%	0.15 - 0.25	%	
<u>Special Properties</u> **						
Heat Deflection Temperature	ISO 75-2 / PA_350	161	°C	321.8	°F	
Coefficient of Thermal Expansion	EN ISO 11403-2	25 - 28	10 ⁻⁶ /K	25 - 28	10 ⁻⁶ /K	
Burning Rate	ISO 3795 / FMVSS302	3 - 4	mm/min	0.12-0.16	in/min	

- 1) = measured in longitudinal direction
 2) = measured in transverse direction
 3) = crosswise molded

* = Property was determined on the laminate

** = Property was determined on flat molded plaques

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