

D100F30

D100F30 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 heat stabilization. It is commonly used for structural and semi-structural applications, like front-end-carrier, seat-back structures, door modules, battery trays, underbody shields.

Properties	Standard	SI Units		Engl. Units	
<u>Physical Properties</u>					
Thickness (Laminate)	Internal	4.8	mm	0.189	in
Area Weight (Laminate)	Internal	5328	g/m ²	1.091	lb/ft ²
Fiber Content (Laminate)	ISO 1172 / PA_73, 78	30	%	30	%
Density (Laminate)	ISO 1183 / PA_137	1.11	g/cm ³	0.0401	lb/in ³
Density (Molded)	ISO 1183 / PA_138	1.13	g/cm ³	0.0408	lb/in ³
<u>Mechanical Properties^{3)*}</u>					
Tensile Strength	ISO 527 / PA_098	65	MPa	9428	psi
Tensile Elongation at break	ISO 527 / PA_098	2.20	%	2.20	%
Tensile Modulus	ISO 527 / PA_098	4400	MPa	638	ksi
Flexural Strength	ISO 178 / PA_100	115	MPa	16681	psi
Flexural Modulus	ISO 178 / PA_100	4300	MPa	624	ksi
Impact Strength -	IZOD (3.2 mm)		J/m		ft*lb(wt)/in
	Charpy (4.0 mm)	ISO 179-1/2fn / PA_97	65	kJ/m ²	31
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	4400	N	989	lb(wt)
Energy @ Max. Load		14	J	10	ft*lb
Energy @ Failure		30	J	22	ft*lb
<u>Processing Properties*</u>					
Molding Shrinkage	ISO 2577	0.2 - 0.35	%	0.2 - 0.35	%
<u>Special Properties*</u>					
Heat Deflection Temperature	ISO 75-2 / PA_350	155	°C	311	°F
Coefficient of Thermal Expansion	EN ISO 11403-2	20-30	10 ⁻⁶ /K	20-30	10 ⁻⁶ /K
Burning rate	ISO 3795 / FMVSS302	<10	mm/min	0.39	in/min

Not suitable for long time of exposure during customer process

1) = measured in longitudinal direction.

2) = measured in transverse direction.

3) = crosswise molded

4) = lengthwise molded

* = Property was determined on flat molded plaques.

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