

D100F30-F1

D100F30-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 high 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>					
Laminate Thickness*	Internal	4.8	mm	0.189	in
Area Weight*	Internal	5328	g/m ²	1.091	lb/ft ²
Fiber Content**	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 Properties³⁾**</u>					
Tensile Strength	ISO 527 / PA_098	60	MPa	8703	psi
Tensile Elongation at break	ISO 527 / PA_098	2.3	%	2.3	%
Tensile Modulus	ISO 527 / PA_098	4100	MPa	595	ksi
Flexural Strength	ISO 178 / PA_100	110	MPa	15956	psi
Flexural Modulus	ISO 178 / PA_100	4000	MPa	580	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	4500	N	1012	lb(wt)
Energy @ Max. Load		15	J	11	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

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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