

C100F30-F1

C100F30-F1 is a chopped fiber glass mat reinforced PP laminate with randomly oriented glass fibers. This product provides good flow properties and a very homogeneous fiber distribution and higher heat stabilization. It is commonly used for structural and semi-structural applications, like front-end-carrier, door modules, underbody shields etc.

Properties	Standard	SI Units		Engl. Units	
<u>Physical Properties</u>					
Laminate Thickness*	Internal	3.8	mm	0.150	in
Area Weight*	Internal	4256	g/m ²	0.872	lb/ft ²
Fiber Content**	ISO 1172 / PA_73, 78	30	%	30	%
Density (Laminate)*	ISO 1183 / PA_137	1.12	g/cm ³	0.0405	lb/in ³
Density (Molded)**	ISO 1183 / PA_138	1.13	g/cm ³	0.0408	lb/in ³
<u>Mechanical Properties</u>³⁾**					
Tensile Strength	ISO 527 / PA_098	60	MPa	8703	psi
Tensile Elongation at Break	ISO 527 / PA_098	2.1	%	2.1	%
Tensile Modulus	ISO 527 / PA_098	4350	MPa	631	ksi
Flexural Strength	ISO 178 / PA_100	110	MPa	15956	psi
Flexural Modulus	ISO 178 / PA_100	4100	MPa	595	ksi
Impact Strength -	IZOD (3.2 mm) Charpy (4.0 mm)	ASTM D256 E	J/m		ft*lb(wt)/in
		ISO 179-1/2fn / PA_97	60	kJ/m ²	29
Multiaxial Impact (4.0 mm)					
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	4700	N	1057	lb(wt)
Energy @ Max. Load		18	J	13	ft*lb
Energy @ Failure		35	J	26	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	150	°C	302	°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	<0.4	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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