

D100F23-F1

D100F23-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 underbody shields.

Properties	Standard	SI Units		Engl. Units	
<u>Physical Properties</u>					
Laminate Thickness*	Internal	4.8	mm	0.189	in
Area Weight*	Internal	4992	g/m ²	1.022	lb/ft ²
Fiber Content**	ISO 1172 / PA_73, 78	23	%	23	%
Density (Laminate)*	ISO 1183 / PA_137	1.04	g/cm ³	0.0376	lb/in ³
Density (Molded)**	ISO 1183 / PA_138	1.06	g/cm ³	0.0383	lb/in ³
<u>Mechanical Properties</u>^{3)**}					
Tensile Strength	ISO 527 / PA_098	50	MPa	7253	psi
Tensile Elongation at Break	ISO 527 / PA_098	2.2	%	2.2	%
Tensile Modulus	ISO 527 / PA_098	3460	MPa	502	ksi
Flexural Strength	ISO 178 / PA_100	90	MPa	13055	psi
Flexural Modulus	ISO 178 / PA_100	3450	MPa	500	ksi
Impact Strength -	IZOD (3.2mm) Charpy (4.0mm)	ASTM D256 E		J/m	
		ISO 179-1/2fn / PA_97		50	kJ/m 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	3800	N	854	lb(wt)
Energy @ Max. Load		14	J	10	ft*lb
Energy @ Failure		25	J	18	ft*lb
<u>Processing Properties</u>**					
Molding Shrinkage	ISO 2577	0.3 - 0.45	%	0.3 - 0.45	%
<u>Special Properties</u>**					
Heat Deflection Temperature	ISO 75-2 / PA_350	145	°C	293	°F
Coefficient of Thermal Expansion	EN ISO 11403-2	30 - 40	10 ⁻⁶ /K	30 - 40	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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