

NOVADURAN®

Polybutylene Terephthalate Resin

				GF Reinforced Alloy			
Properties	Test Method	Terms	Units	5308G30HX3	5308F20	5710G30S2	5710F40
				Improved Surface Appearance	Excellent surface Gloss	Low Warpage Improved Surface Appearance	Superior Low Warpage Improved Surface Appearance
				GF	F	GF	GF+F
				30	20	30	40
Physical properties							
Density	ISO 1183	-	g/cm ³	1.52	1.49	1.51	1.57
Water absorption	-	23degC, Underwater	%	0.07	0.10	0.07	0.07
Dimensional properties							
Moulding shrinkage (1mmt)	-	MD TD	%	0.2 0.6	1.0 1.0	0.2 0.6	0.2 0.5
Moulding shrinkage (3mmt)	-	MD TD	%	0.3 0.9	1.3 1.3	0.3 0.9	0.3 0.6
Mechanical properties							
Tensile modulus	ISO 527-1 , 527-2	-	MPa	9200	5200	10000	10500
Yield stress			-	-	-	-	
Yield strain			%	-	-	-	-
Nominal strain at break			-	-	-	-	
Stress at 50% strain			MPa	-	-	-	-
Stress at break			MPa	115	55	130	117
Strain at break			%	2.0	2.3	2.0	1.8
Flexural strength	ISO 178	-	MPa	200	95	190	178
Flexural modulus			9000	5000	8500	9600	
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m ²	48	-	52	50
Charpy notched impact strength		23 degC	kJ/m ²	8	2	9	9
Thermal properties							
Melting temperature	ISO 11357-3		degC	-	-	-	224
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	180 218	110 190	191 217	200 220
Coefficient of Linear thermal expansion	ISO 11359-2	MD TD	1/degC	3.E-05 6.E-05	- -	3.E-05 6.E-05	4.E-05 6.E-05
Flammability	UL94	0.4mmt	-	-	-	-	-
Flammability	UL94	0.8mmt	-	HB	-	HB	HB
Flammability	UL94	1.6mmt	-	-	-	-	-
Flammability	UL94	3.2mmt	-	-	-	-	-
Electrical properties							
Relative permittivity	IEC 60250	1MHz	-	3.3	3.3	3.4	3.4
Dissipation factor	IEC 60250	1MHz	-	0.014	0.014	0.020	0.020
Volume resistivity	IEC 60093	-	ohm-m	1.E+14	1.E+14	1.E+14	1.E+14
Surface resistivity	IEC 60093	-	ohm	1.E+15	1.E+15	1.E+15	1.E+15
Electric strength	IEC 60243-1	1mmt	MV/m	27	-	28	28
		2mmt		23	-	24	24
		3mmt		-	-	-	-
Comparative tracking index	UL746A	-	-	-	-	-	-

The listed properties are portrayed as general information only and are not product specifications.

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