

NOVADURAN[®]

Polybutylene Terephthalate Resin

Properties	Test Method	Terms	Units	5010G20
				GF20% Reinforced >PBT-GF20<
Physical properties				
Density	ISO 1183	-	g/cm ³	1.45
Water absorption	-	23degC, Underwater	%	0.07
Rheological properties				
Melt Mass-flow Rate	ISO 1133	Temperature Load	g/10min	25
Melt Volume-flow Rate			cm ³ /10min	20
			degC	250
			kg	2.16
Moulding shrinkage(1mmt)	-	MD TD	%	0.4 0.9
Moulding shrinkage(2mmt)	-	MD TD	%	0.5 1.1
Moulding shrinkage(3mmt)	-	MD TD	%	0.6 1.2
Mechanical properties				
Tensile modulus	ISO 527-1 527-2	-	MPa	6500
Yield stress			-	
Yield strain			%	-
Nominal strain at break			-	-
Stress at 50% strain			MPa	-
Stress at break			MPa	118
Strain at break	%	3		
Flexural strength	ISO 178	-	MPa	180
Flexural modulus			MPa	6200
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m ²	35
Charpy notched impact strength		23 degC	kJ/m ²	6
Thermal properties				
Melting temperature	ISO 11357-3		degC	224
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	195 215
Vicat softening temperature	ISO 306	-	degC	210
Coefficient of Linear thermal expansion	ISO 11359-2	MD TD	1/degC	4.E-05 8.E-05
Flammability	UL94	0.8mmt	-	HB
Electrical properties				
Relative permittivity	IEC 60250	100Hz	-	3.9
		1MHz	-	3.8
Dissipation factor	IEC 60250	100Hz	-	0.002
		1MHz	-	0.018
Volume resistivity	IEC 60093	-	ohm-m	1.E+14
Surface resistivity	IEC 60093	-	ohm	1.E+15
Electric strength	IEC 60243-1	1 mmt		25
		2mmt	MV/m	22

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

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