

NOVADURAN®

Polybutylene Terephthalate Resin

Mitsubishi Engineering-Plastics Corporation

				GF Reinforced Flame Retardant
Properties	Test Method	Terms	Units	5010GN6-30TM4E
				Steam Resistant
				GF
				30
Physical properties				
Density	ISO 1183	-	g/cm ³	1.61
Water absorption	-	23degC, Underwater	%	0.08
Rheological properties				
Melt Mass-flow Rate	ISO 1133	Temperature Load	g/10min	17
Melt Volume-flow Rate			cm ³ /10min	14
			degC	250
			kg	2.16
Moulding shrinkage (1mmt)	-	MD	%	0.3
		TD	%	0.8
Moulding shrinkage (3mmt)	-	MD	%	0.3
		TD	%	1.2
Mechanical properties				
Tensile modulus	ISO 527-1 , 527-2	-	MPa	9500
Yield stress			%	-
Yield strain			%	-
Nominal strain at break			MPa	-
Stress at 50% strain			%	120
Stress at break			%	2.2
Strain at break				
Flexural strength	ISO 178	-	MPa	190
Flexural modulus				8900
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m ²	59
Charpy notched impact strength		23 degC	kJ/m ²	9
Thermal properties				
Melting temperature	ISO 11357-3		degC	224
Temperature of deflection	ISO 75-1 , 75-2	1.80MPa	degC	205
under load		0.45MPa		220
Coefficient of Linear thermal expansion	ISO 11359-2	MD	1/degC	3.E-05
		TD		6.E-05
Flammability	UL94	0.4mmt	-	-
Flammability	UL94	0.8mmt	-	V-0
Flammability	UL94	1.6mmt	-	V-0
Flammability	UL94	3.2mmt	-	V-0
GWFI(Glow-wire flammability test method for materials)	IEC 60695-2-12	3.0mmt	-	equal to 960degC
GWIT(Glow-wire ignitability test method for materials)	IEC 60695-2-13	3.0mmt	-	equal to 725degC
Electrical properties				
Relative permittivity	IEC 60250	1MHz	-	4.0
Dissipation factor	IEC 60250	1MHz	-	0.020
Volume resistivity	IEC 60093	-	ohm-m	1.E+13
Surface resistivity	IEC 60093	-	ohm	1.E+15
Electric strength	IEC 60243-1	1mmt	MV/m	23
		2mmt		-
		3mmt		-
Comparative tracking index	UL746A	-	-	-

