

NOVADURAN®

Polybutylene Terephthalate Resin

Mitsubishi Engineering-Plastics Corporation

				GF Reinforced Flame Retardant
Properties	Test Method	Terms	Units	5010FN2-M9
				Low Warpage
				GF+Filler
				35
Physical properties				
Density	ISO 1183	-	g/cm ³	1.64
Water absorption	-	23degC, Underwater	%	0.08
Rheological properties				
Melt Mass-flow Rate	ISO 1133	Temperature Load	g/10min	-
Melt Volume-flow Rate			cm ³ /10min	-
			degC	250
		kg		2.16
Moulding shrinkage (1mmt)	-	MD	%	0.4
		TD		0.8
Moulding shrinkage (3mmt)	-	MD	%	0.4
		TD		1.2
Mechanical properties				
Tensile modulus	ISO 527-1 , 527-2	-	MPa	11000
Yield stress				-
Yield strain			%	-
Nominal strain at break				-
Stress at 50% strain			MPa	-
Stress at break				120
Strain at break			%	1.7
Flexural strength	ISO 178	-	MPa	140
Flexural modulus				9700
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m ²	44
Charpy notched impact strength		23 degC	kJ/m ²	8
Thermal properties				
Melting temperature	ISO 11357-3		degC	224
Temperature of deflection	ISO 75-1 , 75-2	1.80MPa	degC	190
under load		0.45MPa		215
Coefficient of Linear thermal expansion	ISO 11359-2	MD	1/degC	4.E-05
		TD		7.E-05
Flammability	UL94	0.4mmt	-	-
Flammability	UL94	0.8mmt	-	V-0
Flammability	UL94	1.6mmt	-	-
Flammability	UL94	3.2mmt	-	-
GWFI(Glow-wire flammability test method for materials)	IEC 60695-2-12	3.0mmt	-	-
GWIT(Glow-wire ignitability test method for materials)	IEC 60695-2-13	3.0mmt	-	-
Electrical properties				
Relative permittivity	IEC 60250	1MHz	-	3.5
Dissipation factor	IEC 60250	1MHz	-	0.015
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	37
		2mmt		-
		3mmt		-
Comparative tracking index	UL746A	-	-	-

