

NOVADURAN™ 5010F6 X4

Mitsubishi Engineering-Plastics Corp - Polybutylene Terephthalate

General Information

Product Description

Filler-Reinforced / HB, Low warpage

General

Filler / Reinforcement	• Filler, 40% Filler by Weight
Features	• Low Warpage
Uses	• Automotive Applications • Automotive Electronics • Electrical/Electronic Applications • General Purpose

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.62	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	25	cm ³ /10min	ISO 1133
Water Absorption (Saturation, 23°C)	0.080	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	6800	MPa	ISO 527-1/1
Tensile Stress (Break)	95.0	MPa	ISO 527-2/5
Tensile Strain (Break)	2.0	%	ISO 527-2/5
Flexural Modulus ²	6600	MPa	ISO 178
Flexural Stress ²	150	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	5.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	22	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Annealed	212	°C	ISO 75-2/B
1.8 MPa, Annealed	184	°C	ISO 75-2/A
Melting Temperature	224	°C	ISO 11357-3
RTI Elec (0.75 mm)	75.0	°C	UL 746B
RTI Imp (0.75 mm)	75.0	°C	UL 746B
RTI Str (0.75 mm)	75.0	°C	UL 746B
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.0E+16	ohms	IEC 60093
Volume Resistivity	2.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
1.00 mm	30	kV/mm	
2.00 mm	25	kV/mm	
Dielectric Constant (1 MHz)	3.50		IEC 60250
Dissipation Factor (1 MHz)	0.016		IEC 60250



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Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.75 mm)	HB		UL 94

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature - Hot Air Dryer	120	°C	
Drying Time - Hot Air Dryer	5.0 to 8.0	hr	
Rear Temperature	240	°C	
Middle Temperature	245	°C	
Front Temperature	255	°C	
Nozzle Temperature	255	°C	
Mold Temperature	80 to 100	°C	
Injection Pressure	20.0 to 150	MPa	
Injection Rate	Moderate-Fast		
Screw Speed	80 to 120	rpm	

