

General Information

Product Description

Un-reinforced / Flame Retardant V-0 / Toughness, Low Warpage

General

Features	- Flame Retardant - Good Toughness - Low Warpage
Uses	- Automotive Applications - Electrical/Electronic Applications - Automotive Electronics - General Purpose

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	8.0	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 2.00 mm	1.1	%	
Flow : 2.00 mm	1.1	%	
Water Absorption (Saturation, 23°C)	0.080	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2700	MPa	ISO 527-1/1
Tensile Stress (Yield)	60.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	4.0	%	
Break	12	%	
Flexural Modulus ²	2400	MPa	ISO 178
Flexural Stress ²	85.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	200	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Annealed	130	°C	ISO 75-2/B
1.8 MPa, Annealed	105	°C	ISO 75-2/A
Melting Temperature	224	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow : -30 to 35°C	7.6E-5	cm/cm/°C	
Flow : -30 to 120°C	9.5E-5	cm/cm/°C	
Flow : 35 to 120°C	1.1E-4	cm/cm/°C	
Transverse : -30 to 35°C	8.1E-5	cm/cm/°C	
Transverse : -30 to 120°C	1.0E-4	cm/cm/°C	
Transverse : 35 to 120°C	1.2E-4	cm/cm/°C	
RTI Elec (0.75 mm)	75.0	°C	UL 746B



NOVADURAN™ 5710N1X

Mitsubishi Engineering-Plastics Corp - Polybutylene Terephthalate

Thermal	Nominal Value	Unit	Test Method
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	1.0E+16	ohms	IEC 60093
Volume Resistivity	1.0E+16	ohms·cm	IEC 60093
Electric Strength (1.00 mm)	21	kV/mm	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 3		UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.75 mm	V-0		
1.5 mm	V-0		
3.0 mm	V-0		

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 to 260	°C
Middle Temperature	240 to 260	°C
Front Temperature	240 to 260	°C
Nozzle Temperature	260	°C
Mold Temperature	60 to 100	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate-Fast	
Screw Speed	80 to 120	rpm

