NOVADURAN® 5810G30

Polybutylene Terephthalate Alloy

Mitsubishi Engineering-Plastics Corp

Message:

NOVADURAN® 5810G30 is a Polybutylene Terephthalate Alloy (PBT Alloy) material filled with 30% glass fiber. It is available in Asia Pacific, Europe, or North America for injection molding.
Important attributes of NOVADURAN® 5810G30 are:
Flame Rated
Warp Resistant
Typical application of NOVADURAN® 5810G30: Automotive

General Information			
UL YellowCard	E53664-531931		
Filler / Reinforcement	Glass Fiber,30% Filler by Weight		
Features	Low Density Low Warpage		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.44	g/cm³	ISO 1183
Molding Shrinkage			
Across Flow : 2.00 mm	0.50	%	
Flow : 2.00 mm	0.30	%	
Water Absorption (Saturation, 23°C)	0.080	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	9400	MPa	ISO 527-2
Tensile Stress (Break)	120	MPa	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	9000	MPa	ISO 178
Flexural Stress	185	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	10	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	59	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, Unannealed	217	°C	ISO 75-2/B
1.8 MPa, Unannealed	185	°C	ISO 75-2/A
Melting Temperature	224	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow : -30 to 50°C	2.0E-5	cm/cm/°C	
Flow : -30 to 120°C	1.0E-5	cm/cm/°C	

Flow : 50 to 120°C	1.0E-5	cm/cm/°C	
Transverse : -30 to 50°C	8.0E-5	cm/cm/°C	
Transverse : -30 to 120°C	1.0E-4	cm/cm/°C	
Transverse : 50 to 120°C	1.3E-4	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	7.0E+15	ohms	IEC 60093
Volume Resistivity	2.0E+17	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
1.00 mm	40	kV/mm	
2.00 mm	30	kV/mm	
Relative Permittivity (1 MHz)	3.20		IEC 60250
Dissipation Factor (1 MHz)	0.017		IEC 60250
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.750 mm)	HB		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	5.0 to 8.0	hr	
Rear Temperature	240	°C	
Middle Temperature	245	°C	
Front Temperature	255	°C	
Nozzle Temperature	255	°C	
Mold Temperature	80.0 to 100	°C	
Injection Pressure	20.0 to 150	MPa	
Screw Speed	80 to 120	rpm	

Recommended distributors for this material

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