Mitsubishi Engineering-Plastics Corp.

NOVADURAN™ 5710G20S1

Mitsubishi Engineering-Plastics Corp - Polybutylene Terephthalate

General Information

Product Description		
PBT alloy GF-reinforced (20%)/ HB equiv. per in-house testing, Good Surface Finish, Low Warpage		
General		
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight	
Features	• Good Surface Finish	• Low Warpage
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • General Purpose

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.43	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	50	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 2.00 mm	1.1	%	
Flow : 2.00 mm	0.50	%	
Water Absorption (Saturation, 23°C)	0.070	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Break)	110	MPa	ISO 527-2/5
Tensile Strain (Break)	8.0	%	ISO 527-2/5
Flexural Modulus [2]	7000	MPa	ISO 178
Flexural Stress [2]	170	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	8.0	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Annealed)	195	°C	ISO 75-2/A
Melting Temperature	224	°C	ISO 11357-3

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	250 to 270	°C
Middle Temperature	250 to 270	°C
Front Temperature	250 to 270	°C
Nozzle Temperature	270	°C
Mold Temperature	60 to 100	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate-Fast	
Screw Speed	80 to 150	rpm

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 2.0 mm/min