Mitsubishi Engineering-Plastics Corp.

Iupilon™ GMB1110

Mitsubishi Engineering-Plastics Corp - Polycarbonate + Polyester

General Information

Product Description	
PC/POLYESTER, Chemical Resistant, GF10%	
General	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• Chemical Resistant
Uses	• General Purpose
Automotive Specifications	• GM GMP.PC+PET.001

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.29	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	9.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	8.0	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.30 to 0.50	%	
Flow	0.20 to 0.40	%	
Water Absorption (Saturation, 23°C)	0.090	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	4400	MPa	ISO 527-1/1
Tensile Stress (Break)	90.0	MPa	ISO 527-2/5
Tensile Strain (Break)	4.0	%	ISO 527-2/5
Flexural Modulus [2]	4000	MPa	ISO 178
Flexural Stress [2]	135	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	8.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	50	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed	145	°C	ISO 75-2/B
1.8 MPa, Unannealed	136	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	4.5E-5	cm/cm/°C	
Transverse	7.0E-5	cm/cm/°C	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	120	°C
Drying Time - Hot Air Dryer	4.0 to 8.0	hr
Rear Temperature	270 to 290	°C

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Injection	Nominal Value	Unit
Middle Temperature	270 to 290	°C
Front Temperature	270 to 290	°C
Nozzle Temperature	270 to 290	°C
Mold Temperature	60 to 90	°C