



Mitsubishi Engineering-Plastics Corp.

Iupilon™ GSH2050DF

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information			
Product Description			
Reinforced (50%), Low Warpage			
General			
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Features	• Low Warpage		
Uses	• General Purpose		
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.63	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	2.2	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	1.7	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.10 to 0.30	%	
Flow	0.10 to 0.30	%	
Water Absorption (Saturation, 23°C)	0.070	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	11600	MPa	ISO 527-1/1
Tensile Stress (Break)	102	MPa	ISO 527-2/5
Tensile Strain (Break)	1.4	%	ISO 527-2/5
Flexural Modulus ²	10800	MPa	ISO 178
Flexural Stress ²	160	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	7.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	31	kJ/m²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	144	°C	ISO 75-2/B
1.8 MPa, Unannealed	138	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	1.8E-5	cm/cm/°C	
Transverse	3.9E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (CTI)	PLC 4		UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.40 mm)	HB		UL 94



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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	290 to 310	°C
Middle Temperature	290 to 310	°C
Front Temperature	290 to 310	°C
Nozzle Temperature	290 to 310	°C
Mold Temperature	80 to 120	°C

