

Iupilon™ GSH2010PH

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information

Product Description

For Mobile Phone Housing (GF10%), High Impact Strength

General

Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• High Impact Resistance
Uses	• Cell Phones • Electrical Housing

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.26	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	15	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	14	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.30 to 0.50	%	
Flow	0.30 to 0.50	%	
Water Absorption (Saturation, 23°C)	0.14	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2900	MPa	ISO 527-1/1
Tensile Stress (Yield)	52.0	MPa	ISO 527-2/5
Tensile Strain			ISO 527-2/5
Yield	4.8	%	
Break	10	%	
Flexural Modulus ²	2700	MPa	ISO 178
Flexural Stress ²	90.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	10	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	132	°C	ISO 75-2/B
1.8 MPa, Unannealed	125	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	5.8E-5	cm/cm/°C	
Transverse	5.8E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (CTI)	PLC 3		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

