Iupilon™ GSH2030R2

Mitsubishi Engineering-Plastics Corp - *Polycarbonate*

General Information

Product Description			
Glass Fiber Reinforced, GF30%			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Uses	• General Purpose		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.43	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	5.7	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	4.8	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.25 to 0.45	%	
Flow	0.050 to 0.25	%	
Water Absorption (Saturation, 73°F)	0.090	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.29E+6	psi	ISO 527-1/1
Tensile Stress (Break)	17400	psi	ISO 527-2/5
Tensile Strain (Break)	2.5	%	ISO 527-2/5
Flexural Modulus [2]	1.23E+6	psi	ISO 178
Flexural Stress [2]	26100	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	7.1	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength (73°F)	24	ft·lb/in²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	298	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	291	°F	ISO 75-2/A
CLTE - Flow	1.0E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.5E-5	in/in/°F	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	2.0E+15	ohms	IEC 60093
Volume Resistivity	2.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.0394 in	810	V/mil	
0.118 in	510	V/mil	
Dielectric Constant			IEC 60250
1 MHz	3.50		
100 MHz	3.60		
Dissipation Factor			IEC 60250
1 MHz	8.4E-3		
100 MHz	1.1E-3		
Comparative Tracking Index (CTI)	PLC 4		UL 746A
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.016 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit

Drying Temperature - Hot Air Dryer	248 °F
Drying Time - Hot Air Dryer	4.0 to 8.0 hr
Rear Temperature	554 to 590 °F
Middle Temperature	554 to 590 °F
Front Temperature	554 to 590 °F
Nozzle Temperature	554 to 590 °F
Mold Temperature	176 to 248 °F

Notes

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

[2] 0.079 in/min