

Iupilon™ GSH2040R2

Mitsubishi Engineering-Plastics Corp - Polycarbonate

General Information

Product Description

Glass Fiber Reinforced, GF40%

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Uses	• General Purpose

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.52	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	3.7	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	2.7	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.20 to 0.40	%	
Flow	0.050 to 0.25	%	
Water Absorption (Saturation, 73°F)	0.080	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.70E+6	psi	ISO 527-1/1
Tensile Stress (Break)	19600	psi	ISO 527-2/5
Tensile Strain (Break)	2.1	%	ISO 527-2/5
Flexural Modulus ²	1.62E+6	psi	ISO 178
Flexural Stress ²	30500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	7.6	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength (73°F)	26	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	300	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	291	°F	ISO 75-2/A
CLTE - Flow	8.3E-6	in/in/°F	ISO 11359-2
CLTE - Transverse	3.4E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
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

