Infino GP-5400G

Lotte Chemical Corporation - Polybutylene Terephthalate

General Information

General	
Filler / Reinforcement	• Glass Fiber

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.61		ASTM D792
Density (Natural)	1.61	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	10	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	10	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 4.8E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	5.4E-3 to 6.5E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	1.28E+6	psi	ASTM D638
Tensile Modulus	1.31E+6	psi	ISO 527-1/50
Tensile Strength [2] (Yield)	19900	psi	ASTM D638
Tensile Stress (Yield)	23200	psi	ISO 527-2/50
Tensile Strength [2] (Break)	20200	psi	ASTM D638
Tensile Stress (Break)	23200	psi	ISO 527-2/50
Tensile Elongation [2] (Break)	3.0	%	ASTM D638
Tensile Strain (Break)	3.9	%	ISO 527-2/50
Flexural Modulus [3]	1.56E+6	psi	ASTM D790
Flexural Modulus [4]	1.45E+6	psi	ISO 178
Flexural Strength [3]	29900	psi	ASTM D790
Flexural Stress [4]	31900	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [5] (73°F)	5.2	ft·lb/in²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.7	ft·lb/in	
73°F, 0.250 in	1.7	ft·lb/in	
Notched Izod Impact Strength [5] (73°F)	5.7	ft·lb/in²	ISO 180/1A
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	115		ASTM D785
Rockwell Hardness (R-Scale)	115		ISO 2039-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	435	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	432	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Annealed, 0.157 in	432	°F	

Infino GP-5400G

Lotte Chemical Corporation - Polybutylene Terephthalate

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	410	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	405	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Annealed, 0.157 in	405	°F	
Vicat Softening Temperature	412	°F	ISO 306/B50

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in	HB		
0.07 in	HB		
0.12 in	HB		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	212	°F
Hot Air Dryer	212	°F
Drying Time		
Desiccant Dryer	2.0 to 4.0	hr
Hot Air Dryer	4.0 to 6.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	410 to 428	°F
Middle Temperature	437 to 446	°F
Front Temperature	464 to 482	°F
Nozzle Temperature	482	°F
Mold Temperature	140 to 248	°F
Injection Pressure	7110 to 35600	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 250°C

Notes

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

[2] 0.20 in/min

[3] 0.11 in/min

[4] 0.079 in/min

[5] 4mm