

Infino GC-1022U

Lotte Chemical Corporation - Polycarbonate

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.18		ASTM D792
Density (Natural)	1.18	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	18	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	18	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.40 to 0.70	%	
Flow : 0.0787 in	0.40 to 0.70	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	284000	psi	ASTM D638
Tensile Modulus	290000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	8390	psi	ASTM D638
Tensile Stress (Yield)	7980	psi	ISO 527-2/50
Tensile Strength ² (Break)	8530	psi	ASTM D638
Tensile Stress (Break)	8700	psi	ISO 527-2/50
Tensile Elongation ² (Break)	100	%	ASTM D638
Tensile Strain (Break)	100	%	ISO 527-2/50
Flexural Modulus ³	299000	psi	ASTM D790
Flexural Modulus ⁴	305000	psi	ISO 178
Flexural Strength ³	11400	psi	ASTM D790
Flexural Stress ⁴	11600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	24	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact (73°F, 0.125 in)	11	ft-lb/in	ASTM D256
Notched Izod Impact Strength ⁵ (73°F)	24	ft-lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Rockwell Hardness (R-Scale)	120		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	261	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	253	°F	
Vicat Softening Temperature	288	°F	ISO 306/B50

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.030 in		V-2	
0.04 in		V-2	
0.05 in		V-1	
0.06 in		V-0	
0.12 in		V-0	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	212 to 248	°F
Hot Air Dryer	212 to 248	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	428 to 500	°F
Middle Temperature	464 to 536	°F
Front Temperature	500 to 572	°F
Nozzle Temperature	500 to 572	°F
Mold Temperature	158 to 212	°F
Injection Pressure	9960 to 18500	psi
Back Pressure	142 to 284	psi
Screw Speed	60 to 90	rpm

Injection Notes

Hot Runner Temperature: 260 to 300°C

Notes

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

² 2.0 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ 4mm