Infino FD-1112L

Lotte Chemical Corporation - Polycarbonate

General Information

General

Uses	• Lighting Applications

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.20		ASTM D792
Density (Natural)	1.20	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)			ASTM D1238
250°C/10.0 kg	13	g/10 min	
300°C/1.2 kg	8.0	g/10 min	
Melt Mass-Flow Rate (MFR)			ISO 1133
250°C/10.0 kg	13	g/10 min	
300°C/1.2 kg	8.0	g/10 min	
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]	305000	psi	ASTM D638
Tensile Modulus	276000	psi	ISO 527-1/50
Tensile Strength [2] (Yield)	8960	psi	ASTM D638
Tensile Stress (Yield)	8700	psi	ISO 527-2/50
Tensile Strength [2] (Break)	9960	psi	ASTM D638
Tensile Stress (Break)	10200	psi	ISO 527-2/50
Tensile Elongation [2] (Break)	100	%	ASTM D638
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus [3]	299000	psi	ASTM D790
Flexural Modulus [4]	305000	psi	ISO 178
Flexural Strength [3]	13200	psi	ASTM D790
Flexural Stress [4]	13100	psi	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength [5] (73°F)	4.8	ft·lb/in²	ISO 179/1eA
Notched Izod Impact (73°F, 0.125 in)	1.8	ft·lb/in	ASTM D256
Notched Izod Impact Strength [5] (73°F)	3.3	ft·lb/in²	ISO 180/1A

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	122		ASTM D785
Rockwell Hardness (R-Scale)	122		ISO 2039-2

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	259	°F	

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	253	°F	
Vicat Softening Temperature	289	°F	ISO 306/B50

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.031 in	V-2		
0.12 in	V-2		

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	2.0 to 6.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	464 to 482	°F
Middle Temperature	500 to 518	°F
Front Temperature	536 to 554	°F
Nozzle Temperature	554 to 590	°F
Mold Temperature	104 to 212	°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: 290 to 310°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