

Infino ES-1100

Lotte Chemical Corporation - Polycarbonate

General Information

General

Uses • Caps • Sheet

Properties ¹

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) (300°C/1.2 kg)	10	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	10	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	311000	psi	ASTM D638
Tensile Modulus	305000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	9530	psi	ASTM D638
Tensile Stress (Yield)	9860	psi	ISO 527-2/50
Tensile Strength ² (Break)	9100	psi	ASTM D638
Tensile Stress (Break)	8700	psi	ISO 527-2/50
Tensile Elongation ² (Break)	96	%	ASTM D638
Tensile Strain (Break)	96	%	ISO 527-2/50
Flexural Modulus ³	336000	psi	ASTM D790
Flexural Modulus ³	319000	psi	ISO 178
Flexural Strength ³	14200	psi	ASTM D790
Flexural Stress ³	13100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁴ (73°F)	3.8	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.5	ft·lb/in	
73°F, 0.250 in	1.1	ft·lb/in	
Notched Izod Impact Strength ⁴ (73°F)	2.9	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact			ASTM D4812
-22°F, 0.00492 in	No Break		
-22°F, 0.250 in	No Break		
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	119		ASTM D785
Rockwell Hardness (R-Scale)	119		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in	259	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	257	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	250	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	248	°F	ISO 75-2/A
Vicat Softening Temperature	273	°F	ISO 306/B50

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	248	°F
Hot Air Dryer	248	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.020 to 0.030	%
Rear Temperature	482 to 509	°F
Middle Temperature	509 to 518	°F
Front Temperature	536 to 545	°F
Nozzle Temperature	554	°F
Mold Temperature	122 to 140	°F
Injection Pressure	9960 to 29900	psi
Back Pressure	71.1 to 284	psi
Screw Speed	30 to 70	rpm

Injection Notes

Hot Runner Temperature: 280°C

Notes

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

² 2.0 in/min

³ 0.11 in/min

⁴ 4mm