

Infino ML-1010R

Lotte Chemical Corporation - Polycarbonate

General Information

General			
Uses	• Medical Devices		
Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.20		ASTM D792
Density (Natural)	1.20	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.50 to 0.70	%	
Flow : 0.0787 in	0.50 to 0.70	%	
Across Flow : 0.126 in	0.50 to 0.70	%	
Flow : 0.126 in	0.50 to 0.70	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	327000	psi	ASTM D638
Tensile Modulus	334000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	9100	psi	ASTM D638
Tensile Stress (Yield)	9280	psi	ISO 527-2/50
Tensile Strength ² (Break)	9100	psi	ASTM D638
Tensile Stress (Break)	9280	psi	ISO 527-2/50
Tensile Elongation ² (Break)	110	%	ASTM D638
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus ³	327000	psi	ASTM D790
Flexural Modulus ⁴	334000	psi	ISO 178
Flexural Strength ³	13100	psi	ASTM D790
Flexural Stress ⁴	13300	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	36	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	16	ft·lb/in	
73°F, 0.250 in	2.8	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	38	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

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in	279	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	279	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	261	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	257	°F	ISO 75-2/A
Vicat Softening Temperature	295	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.03 to 0.12 in)	V-2		UL 94

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	< 0.050	%
Rear Temperature	122 to 176	°F
Middle Temperature	518 to 536	°F
Front Temperature	518 to 554	°F
Nozzle Temperature	500 to 554	°F
Mold Temperature	158 to 212	°F
Injection Pressure	925	psi
Back Pressure	42.7 to 107	psi
Screw Speed	50 to 75	rpm

Injection Notes

Hot Runner Temperature: 260 to 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 0.079 in/min

⁵ 4mm