

# Infino MR-1015

Lotte Chemical Corporation - Polycarbonate

## General Information

### General

Uses • Medical Devices

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.20		ASTM D792
Density (Natural)	1.20	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	18	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 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 <sup>2</sup>	327000	psi	ASTM D638
Tensile Modulus	334000	psi	ISO 527-1/50
Tensile Strength <sup>2</sup> (Yield)	9100	psi	ASTM D638
Tensile Stress (Yield)	9280	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Break)	9100	psi	ASTM D638
Tensile Stress (Break)	9280	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	110	%	ASTM D638
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus <sup>3</sup>	327000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	334000	psi	ISO 178
Flexural Strength <sup>3</sup>	13100	psi	ASTM D790
Flexural Stress <sup>4</sup>	13300	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	31	ft·lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	15	ft·lb/in	
73°F, 0.250 in	1.8	ft·lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	33	ft·lb/in <sup>2</sup>	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
66 psi, Unannealed, 0.252 in	271	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	271	°F	

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### Lotte Chemical Corporation - Polycarbonate

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	253	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	250	°F	ISO 75-2/A
Vicat Softening Temperature	286	°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	0.050	%
Rear Temperature	122 to 176	°F
Middle Temperature	482 to 518	°F
Front Temperature	518 to 572	°F
Nozzle Temperature	572	°F
Mold Temperature	176 to 248	°F
Injection Pressure	925	psi
Back Pressure	213	psi
Screw Speed	120 to 130	rpm

### Injection Notes

Hot Runner Temperature: 290 to 300°C

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

<sup>3</sup> 0.11 in/min

<sup>4</sup> 0.079 in/min

<sup>5</sup> 4mm