

# Infino EN-1052

Lotte Chemical Corporation - Polycarbonate

## General Information

### General

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

## Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.18		ASTM D792
Density (Natural)	1.18	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	19	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	19	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>	270000	psi	ASTM D638
Tensile Modulus	305000	psi	ISO 527-1/50
Tensile Strength <sup>2</sup> (Yield)	7540	psi	ASTM D638
Tensile Stress (Yield)	7980	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Break)	8820	psi	ASTM D638
Tensile Stress (Break)	9720	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	94	%	ASTM D638
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus <sup>3</sup>	299000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	305000	psi	ISO 178
Flexural Strength <sup>3</sup>	10800	psi	ASTM D790
Flexural Stress <sup>4</sup>	11600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	33	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	13	ft-lb/in	
73°F, 0.250 in	10	ft-lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	31	ft-lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	118		ASTM D785
Rockwell Hardness (R-Scale)	120		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	275	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	264	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	250	°F	

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Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	288	°F	ISO 306/B50
RTI Elec (0.06 in)	266	°F	UL 746B
RTI Imp (0.06 in)	266	°F	UL 746B
RTI Str (0.06 in)	266	°F	UL 746B

  

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

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	248	°F
Hot Air Dryer	248	°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 590	°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

<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