

# Infino NH-1035

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)	1.20		ASTM D792
Density (Natural)	1.20	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	35	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	35	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
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	313000	psi	ASTM D638
Tensile Modulus	319000	psi	ISO 527-1/50
Tensile Strength <sup>2</sup> (Yield)	8530	psi	ASTM D638
Tensile Stress (Yield)	8560	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Break)	8110	psi	ASTM D638
Tensile Stress (Break)	8270	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	40	%	ASTM D638
Tensile Strain (Break)	88	%	ISO 527-2/50
Flexural Modulus <sup>3</sup>	356000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	334000	psi	ISO 178
Flexural Strength <sup>3</sup>	12800	psi	ASTM D790
Flexural Stress <sup>4</sup>	13100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	26	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	2.8	ft-lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	26	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			ISO 75-2/B
66 psi, Unannealed, 0.157 in	248	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Annealed, 0.157 in	252	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	235	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	225	°F	

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## Lotte Chemical Corporation - Polycarbonate

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	241	°F	ISO 75-2/A
Vicat Softening Temperature	264	°F	ISO 306/B120
--	261	°F	ISO 306/B50

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.08 to 0.11 in		V-0	
		5VB	

### 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 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