

# Infino SI-3109GL

Lotte Chemical Corporation - Polycarbonate

## General Information

General	
Filler / Reinforcement	• Glass Fiber
Uses	• Electrical/Electronic Applications

## Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.26		ASTM D792
Density (Natural)	1.25	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	20	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)	3.0E-3 to 5.0E-3	in/in	ASTM D955
Ash Content	9.8	%	ISO 3451
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	313000	psi	ASTM D638
Tensile Modulus	348000	psi	ISO 527-1/50
Tensile Strength <sup>3</sup> (Yield)	8110	psi	ASTM D638
Tensile Stress (Yield)	8270	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Break)	6830	psi	ASTM D638
Tensile Stress (Break)	6670	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	47	%	ASTM D638
Tensile Strain (Break)	15	%	ISO 527-2/50
Flexural Modulus <sup>4</sup>	356000	psi	ASTM D790
Flexural Modulus <sup>5</sup>	377000	psi	ISO 178
Flexural Strength <sup>4</sup>	12800	psi	ASTM D790
Flexural Stress <sup>5</sup>	12800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>6</sup> (73°F)	4.8	ft·lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.7	ft·lb/in	
73°F, 0.250 in	1.5	ft·lb/in	
Notched Izod Impact Strength <sup>6</sup> (73°F)	4.2	ft·lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	89		ASTM D785
Rockwell Hardness (R-Scale)	120		ISO 2039-2

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<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in	288	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	284	°F	ISO 75-2/B
Deflection Temperature Under Load 66 psi, Annealed, 0.157 in	284	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	268	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	261	°F	ISO 75-2/A
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	262	°F	ISO 75-2/A
Vicat Softening Temperature			
--	• •	298 297	°F ISO 306/B120
--	• •	295 293	°F ISO 306/B50
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.031 in)	V-2		UL 94

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature		
Desiccant Dryer	248	°F
Hot Air Dryer	248	°F
Drying Time		
Desiccant Dryer	2.0 to 4.0	hr
Hot Air Dryer	4.0 to 6.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	500	°F
Middle Temperature	500	°F
Front Temperature	518	°F
Nozzle Temperature	518	°F
Mold Temperature	158 to 212	°F
Injection Pressure	13500	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

**Injection Notes**

Hot Runner Temperature: 260°C

**Notes**

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

<sup>2</sup> 0.20 in/min

<sup>3</sup> 2.0 in/min

<sup>4</sup> 0.11 in/min

<sup>5</sup> 0.079 in/min

<sup>6</sup> 4mm