

# Infino HX-4452G

Lotte Chemical Corporation - Polyphthalamide

## General Information

### General

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

## Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.58		ASTM D792
Density (Natural)	1.58	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (330°C/2.16 kg)	8.5	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (330°C/2.16 kg)	8.5	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	2.0E-3 to 4.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.40 to 0.60	%	
Flow : 0.0787 in	0.20 to 0.40	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield)	21300	psi	ASTM D638
Tensile Stress (Yield)	21800	psi	ISO 527-2/50
Tensile Strength <sup>3</sup> (Break)	21300	psi	ASTM D638
Tensile Stress (Break)	21800	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	3.0	%	ASTM D638
Tensile Strain (Break)	3.0	%	ISO 527-2/50
Flexural Modulus <sup>4</sup>	1.92E+6	psi	ASTM D790
Flexural Modulus <sup>5</sup>	1.96E+6	psi	ISO 178
Flexural Strength <sup>4</sup>	34100	psi	ASTM D790
Flexural Stress <sup>5</sup>	34800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>6</sup> (73°F)	2.9	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.1	ft-lb/in	
73°F, 0.250 in	1.1	ft-lb/in	
Notched Izod Impact Strength <sup>6</sup> (73°F)	2.9	ft-lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	125		ASTM D785
Rockwell Hardness (R-Scale)	128		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	545	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	545	°F	

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## Lotte Chemical Corporation - Polyphthalamide

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.02 to 0.13 in)	V-0		UL 94

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	212	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	608 to 626	°F
Middle Temperature	608 to 644	°F
Front Temperature	608 to 626	°F
Nozzle Temperature	626	°F
Mold Temperature	212 to 266	°F
Injection Pressure	9960 to 21300	psi
Back Pressure	71.1 to 142	psi
Screw Speed	200 to 250	rpm

#### Injection Notes

Hot Runner Temperature: 330°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> 0.79 in/min

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

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

<sup>6</sup> 4mm