

# Infino HM-4500G

Lotte Chemical Corporation - Polyphthalamide

## General Information

### General

Filler / Reinforcement • Glass Fiber

### 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
Molding Shrinkage - Flow (0.126 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Ash Content			
--	50	%	ASTM D5630
--	50	%	ISO 3451
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield)	35600	psi	ASTM D638
Tensile Stress (Yield)	36300	psi	ISO 527-2/5
Tensile Strength <sup>2</sup> (Break)	35600	psi	ASTM D638
Tensile Stress (Break)	36300	psi	ISO 527-2/5
Tensile Elongation <sup>2</sup> (Break)	3.0	%	ASTM D638
Tensile Strain (Break)	3.0	%	ISO 527-2/5
Flexural Modulus <sup>3</sup>	2.13E+6	psi	ASTM D790
Flexural Modulus <sup>4</sup>	2.18E+6	psi	ISO 178
Flexural Strength <sup>3</sup>	49800	psi	ASTM D790
Flexural Stress <sup>4</sup>	50800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	6.2	ft·lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	2.4	ft·lb/in	
73°F, 0.250 in	2.4	ft·lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	6.2	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
264 psi, Unannealed, 0.252 in	464	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	464	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.031 in		HB	
0.12 in		HB	

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### Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176 to 212	°F
Hot Air Dryer	212 to 248	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	500 to 518	°F
Middle Temperature	536 to 554	°F
Front Temperature	554 to 590	°F
Nozzle Temperature	554 to 572	°F
Mold Temperature	212 to 266	°F
Injection Pressure	71100 to 356000	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

### Injection Notes

Hot Runner Temperature: 300 to 320°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> 0.11 in/min

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

<sup>5</sup> 4mm