

Infino HA-4400MP

Lotte Chemical Corporation - Polyphthalamide

General Information

General

Filler / Reinforcement	• Mineral
Uses	• Automotive Applications

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.44		ASTM D792
Density (Natural)	1.44	g/cm ³	ISO 1183
Molding Shrinkage - Flow (0.126 in)	1.0E-3 to 3.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	3.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	24900	psi	ASTM D638
Tensile Stress (Yield)	25400	psi	ISO 527-2/5
Tensile Strength ² (Break)	24900	psi	ASTM D638
Tensile Stress (Break)	25400	psi	ISO 527-2/5
Tensile Elongation ² (Break)	4.0	%	ASTM D638
Tensile Strain (Break)	4.0	%	ISO 527-2/5
Flexural Modulus ³	1.28E+6	psi	ASTM D790
Flexural Modulus ⁴	1.31E+6	psi	ISO 178
Flexural Strength ³	34100	psi	ASTM D790
Flexural Stress ⁴	34800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	4.8	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.8	ft·lb/in	
73°F, 0.250 in	1.8	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	4.8	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	100		ASTM D785
Rockwell Hardness (R-Scale)	100		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	527	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	527	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	212	°F

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Injection	Nominal Value	Unit
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	590 to 626	°F
Middle Temperature	608 to 626	°F
Front Temperature	608 to 626	°F
Nozzle Temperature	608	°F
Mold Temperature	248 to 302	°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

¹ Typical properties: these are not to be construed as specifications.

² 0.20 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ 4mm