Infino HC-8040

Lotte Chemical Corporation - Polyamide + PPE

General Information

General

Uses	• Automotive Applications

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.10		ASTM D792
Density (Natural)	1.10	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (280°C/5.0 kg)	22	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (280°C/5.0 kg)	22	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	9.0E-3 to 0.012	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	9.0E-3 to 0.011	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	292000	psi	ASTM D638
Tensile Modulus	305000	psi	ISO 527-1/20
Tensile Strength [2] (Yield)	8680	psi	ASTM D638
Tensile Stress (Yield)	8700	psi	ISO 527-2/50
Tensile Strength [2] (Break)	8680	psi	ASTM D638
Tensile Stress (Break)	8700	psi	ISO 527-2/50
Tensile Elongation [2] (Break)	30	%	ASTM D638
Tensile Strain (Break)	27	%	ISO 527-2/50
Flexural Modulus [3]	313000	psi	ASTM D790
Flexural Modulus [4]	305000	psi	ISO 178
Flexural Strength [3]	12200	psi	ASTM D790
Flexural Stress [4]	13600	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [5] (73°F)	9.5	ft·lb/in²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	3.7	ft·lb/in	
73°F, 0.250 in	3.4	ft·lb/in	
Notched Izod Impact Strength [5] (73°F)	9.5	ft·lb/in²	ISO 180/1A
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	114		ASTM D785
Rockwell Hardness (R-Scale)	114		ISO 2039-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	226	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	185	°F	
CLTE - Flow			ASTM E831
-40 to 40°F	4.4E-5	in/in/°F	
104 to 212°F	5.0E-5	in/in/°F	

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Thermal	Nominal Value	Unit	Test Method
CLTE - Flow			ISO 11359-2
-40 to 104°F	4.4E-5	in/in/°F	
104 to 212°F	5.0E-5	in/in/°F	
CLTE - Transverse			ASTM E831
-40 to 40°F	4.7E-5	in/in/°F	
104 to 212°F	5.8E-5	in/in/°F	
CLTE - Transverse			ISO 11359-2
-40 to 104°F	4.7E-5	in/in/°F	
104 to 212°F	5.8E-5	in/in/°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	230 to 248	°F
Hot Air Dryer	212	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	6.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	500 to 536	°F
Middle Temperature	518 to 554	°F
Front Temperature	536 to 572	°F
Nozzle Temperature	518 to 554	°F
Mold Temperature	176 to 248	°F
Injection Pressure	14200 to 28400	psi
Back Pressure	711 to 1420	psi
Screw Speed	40 to 70	rpm

Injection Notes

Hot Runner Temperature: 295 to 305°C

Notes

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

[2] 2.0 in/min

[3] 0.11 in/min

[4] 0.079 in/min

[5] 4mm