Infino HP-1000XA

Lotte Chemical Corporation - Polycarbonate + ABS

Tuesday, June 27, 2023

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Automotive Applications		
Automotive Specifications	• CHERRY Q/SQR.04.131	• GM GMW15581P-ABS+PC-T3	• IMDS ID 142029298

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.13		ASTM D792
Density (Natural)	1.13	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	27	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	27	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.40 to 0.70	%	
Flow : 0.0787 in	0.40 to 0.70	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	292000	psi	ASTM D638
Tensile Modulus	290000	psi	ISO 527-1/50
Tensile Strength [2] (Yield)	7820	psi	ASTM D638
Tensile Stress (Yield)	7250	psi	ISO 527-2/50
Tensile Strength [2] (Break)	8530	psi	ASTM D638
Tensile Stress (Break)	7690	psi	ISO 527-2/50
Tensile Elongation [2] (Break)	100	%	ASTM D638
Tensile Strain (Break)	100	%	ISO 527-2/50
Flexural Modulus [3]	292000	psi	ASTM D790
Flexural Modulus [4]	305000	psi	ISO 178
Flexural Strength [3]	10700	psi	ASTM D790
Flexural Stress [4]	11600	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [5] (73°F)	23	ft·lb/in²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	11	ft·lb/in	
73°F, 0.250 in	8.2	ft·lb/in	
Notched Izod Impact Strength [5] (73°F)	21	ft·lb/in²	ISO 180/1A

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Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	113		ASTM D785
Rockwell Hardness (R-Scale)	113		ISO 2039-2

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	253	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Annealed, 0.157 in	257	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	230	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	216	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Annealed, 0.157 in	234	°F	
Vicat Softening Temperature			
--	253	°F	ISO 306/B50
--	257	°F	ISO 306/120

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	194 to 212	°F
Hot Air Dryer	194 to 212	°F
Drying Time		
Desiccant Dryer	2.0 to 4.0	hr
Hot Air Dryer	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	410 to 446	°F
Middle Temperature	446 to 482	°F
Front Temperature	482 to 509	°F
Nozzle Temperature	482 to 536	°F
Mold Temperature	140 to 194	°F
Injection Pressure	21300	psi
Back Pressure	71.1 to 356	psi
Screw Speed	50 to 80	rpm

Injection Notes

Hot Runner Temperature: 250 to 280°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