

Infino TP-1020

Lotte Chemical Corporation - Polycarbonate

General Information

General

Uses • Automotive Applications

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.19		ASTM D792
Density (Natural)	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			ASTM D1238
250°C/10.0 kg	30	g/10 min	
300°C/1.2 kg	20	g/10 min	
Melt Mass-Flow Rate (MFR)			ISO 1133
250°C/10.0 kg	30	g/10 min	
300°C/1.2 kg	20	g/10 min	
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	327000	psi	ASTM D638
Tensile Modulus	305000	psi	ISO 527-1/5
Tensile Strength ² (Yield)	8530	psi	ASTM D638
Tensile Stress (Yield)	8560	psi	ISO 527-2/5
Tensile Strength ² (Break)	9960	psi	ASTM D638
Tensile Stress (Break)	9720	psi	ISO 527-2/5
Tensile Elongation ² (Break)	110	%	ASTM D638
Tensile Strain (Break)	110	%	ISO 527-2/5
Flexural Modulus ³	327000	psi	ASTM D790
Flexural Modulus ⁴	305000	psi	ISO 178
Flexural Strength ³	13100	psi	ASTM D790
Flexural Stress ⁴	13100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	7.6	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	12	ft·lb/in	
73°F, 0.250 in	1.8	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	25	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785
Rockwell Hardness (R-Scale)	121		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in	289	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	282	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	264	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	255	°F	ISO 75-2/A
Vicat Softening Temperature			
--	304	°F	ISO 306/B120
--	293	°F	ISO 306/B50
--	295	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	V-2		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	212 to 248	°F
Hot Air Dryer	212 to 248	°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	500 to 518	°F
Middle Temperature	518 to 536	°F
Front Temperature	536 to 572	°F
Nozzle Temperature	572	°F
Mold Temperature	140 to 194	°F
Injection Pressure	14200	psi
Back Pressure	71.1 to 356	psi
Screw Speed	50 to 100	rpm

Injection Notes

Hot Runner Temperature: 280 to 300°C

Notes

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

² 0.20 in/min

³ 1.2 in/min

⁴ 0.079 in/min

⁵ 4mm