

Infino TK-2050LP

Lotte Chemical Corporation - Polycyclohexylenedimethylene Terephthalate

General Information

General

Filler / Reinforcement • Glass Fiber

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.71		ASTM D792
Density (Natural)	1.71	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	22	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	22	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	%	
Ash Content			
--	46	%	ASTM D5630
--	46	%	ISO 3451
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	782000	psi	ASTM D638
Tensile Modulus	798000	psi	ISO 527-1/10
Tensile Strength ² (Yield)	8530	psi	ASTM D638
Tensile Stress (Yield)	8700	psi	ISO 527-2/10
Tensile Strength ² (Break)	8530	psi	ASTM D638
Tensile Stress (Break)	8700	psi	ISO 527-2/10
Tensile Elongation ² (Break)	2.1	%	ASTM D638
Tensile Strain (Break)	2.1	%	ISO 527-2/10
Flexural Modulus ³	711000	psi	ASTM D790
Flexural Modulus ⁴	725000	psi	ISO 178
Flexural Strength ³	10700	psi	ASTM D790
Flexural Stress ⁴	10900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	1.4	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength ⁵ (73°F)	11	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact			ASTM D256
73°F, 0.125 in	0.51	ft·lb/in	
73°F, 0.250 in	0.37	ft·lb/in	
73°F, 0.250 in	3.9	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	0.95	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact (73°F, 0.125 in)	5.3	ft·lb/in	ASTM D4812
Unnotched Izod Impact Strength ⁵ (73°F)	8.6	ft·lb/in ²	ISO 180/1U

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	383	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	383	°F	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating 0.06 in 0.12 in	HB HB		UL 94
Optical	Nominal Value	Unit	Test Method
Yellowness Index (0.126 in)	5.0	YI	ASTM D1925
Additional Information	Nominal Value	Unit	Test Method
Initial Reflectance (0.13 in)	94	%	ASTM E1331

Processing Information

Injection	Nominal Value	Unit
Drying Temperature Desiccant Dryer Hot Air Dryer	176 to 212 212	°F °F
Drying Time Desiccant Dryer Hot Air Dryer	4.0 4.0	hr hr
Suggested Max Moisture	0.060	%
Rear Temperature	554 to 572	°F
Middle Temperature	572	°F
Front Temperature	581 to 590	°F
Nozzle Temperature	581 to 590	°F
Mold Temperature	122 to 140	°F
Injection Pressure	1140 to 1850	psi
Back Pressure	1140 to 1850	psi
Screw Speed	180 to 250	rpm

Injection Notes

Hot Runner Temperature: 0°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