

Infino MKD-1016

Lotte Chemical Corporation - Polyamide

General Information

General

Filler / Reinforcement • Glass Fiber

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.64		ASTM D792
Density (Natural)	1.64	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			ASTM D1238
275°C/2.16 kg	13	g/10 min	
300°C/1.2 kg	10	g/10 min	
Melt Mass-Flow Rate (MFR)			ISO 1133
275°C/2.16 kg	13	g/10 min	
300°C/1.2 kg	10	g/10 min	
Molding Shrinkage - Flow (0.126 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (Saturation, 73°F)	3.9	%	ASTM D570
Water Absorption (Saturation, 73°F)	3.9	%	ISO 62
Ash Content			
--	55	%	ASTM D5630
--	55	%	ISO 3451
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	2.70E+6	psi	ASTM D638
Tensile Modulus	2.70E+6	psi	ISO 527-1/50
Tensile Strength ² (Yield)	38400	psi	ASTM D638
Tensile Stress (Yield)	37700	psi	ISO 527-2/5
Tensile Strength ² (Break)	38400	psi	ASTM D638
Tensile Stress (Break)	37700	psi	ISO 527-2/50
Tensile Elongation ² (Break)	4.2	%	ASTM D638
Tensile Strain (Break)	4.2	%	ISO 527-2/5
Flexural Modulus ³	2.22E+6	psi	ASTM D790
Flexural Modulus ⁴	2.32E+6	psi	ISO 178
Flexural Strength ³	48400	psi	ASTM D790
Flexural Stress ⁴	47900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	8.1	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	2.4	ft·lb/in	
73°F, 0.250 in	2.2	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	8.1	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785

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Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	482	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	482	°F	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.031 in		HB	
0.06 in		HB	
0.12 in		HB	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	212	°F
Drying Time		
Desiccant Dryer	2.0 to 3.0	hr
Hot Air Dryer	2.0 to 4.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	500 to 518	°F
Middle Temperature	536 to 554	°F
Front Temperature	572 to 590	°F
Nozzle Temperature	572	°F
Mold Temperature	140 to 266	°F
Injection Pressure	7110 to 35600	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 300°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