

Infino ASF-9810F

Lotte Chemical Corporation - Polybutylene Terephthalate + PET

General Information

General	
Filler / Reinforcement	• Mineral
Uses	• Automotive Applications

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.31		ASTM D792
Density (Natural)	1.31	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	55	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	55	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	0.015 to 0.018	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	0.016 to 0.019	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	1.6 to 1.9	%	
Flow : 0.0787 in	1.5 to 1.8	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	363000	psi	ASTM D638
Tensile Modulus	341000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	8530	psi	ASTM D638
Tensile Stress (Yield)	8410	psi	ISO 527-2/50
Tensile Elongation ² (Break)	15	%	ASTM D638
Tensile Strain (Break)	15	%	ISO 527-2/50
Flexural Modulus ³	356000	psi	ASTM D790
Flexural Modulus ⁴	336000	psi	ISO 178
Flexural Strength ³	12100	psi	ASTM D790
Flexural Stress ⁴	11600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	1.8	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	0.70	ft-lb/in	
73°F, 0.250 in	0.77	ft-lb/in	
Notched Izod Impact Strength ⁵ (73°F)	1.9	ft-lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	116		ASTM D785
Rockwell Hardness (R-Scale)	116		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	329	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	266	°F	

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	140	°F	ISO 75-2/A
Vicat Softening Temperature	356	°F	ISO 306/B50

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	248	°F
Hot Air Dryer	248	°F
Drying Time		
Desiccant Dryer	> 4.0	hr
Hot Air Dryer	> 4.0	hr
Suggested Max Moisture	< 0.10	%
Rear Temperature	410 to 428	°F
Middle Temperature	446 to 464	°F
Front Temperature	482 to 500	°F
Nozzle Temperature	500	°F
Mold Temperature	86 to 140	°F
Injection Pressure	12800	psi
Back Pressure	142 to 284	psi
Screw Speed	30 to 80	rpm

Injection Notes

Hot Runner Temperature: 240°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