

# Infino ASF-9810FL

Lotte Chemical Corporation - Polybutylene Terephthalate

## General Information

### General

Uses • Automotive Applications

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.31		ASTM D792
Density (Natural)	1.31	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	40	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	40	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	0.018 to 0.020	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	0.018 to 0.020	in/in	ASTM D955
Water Absorption (Saturation, 73°F)	0.40	%	ASTM D570
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	334000	psi	ASTM D638
Tensile Modulus	334000	psi	ISO 527-1/50
Tensile Strength <sup>2</sup> (Yield)	8530	psi	ASTM D638
Tensile Stress (Yield)	8410	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Break)	7110	psi	ASTM D638
Tensile Stress (Break)	7110	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	50	%	ASTM D638
Tensile Strain (Break)	50	%	ISO 527-2/50
Flexural Modulus <sup>3</sup>	363000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	334000	psi	ISO 178
Flexural Strength <sup>3</sup>	12100	psi	ASTM D790
Flexural Stress <sup>4</sup>	11600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	2.4	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	0.64	ft-lb/in	
73°F, 0.250 in	0.73	ft-lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	1.9	ft-lb/in <sup>2</sup>	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	320	°F	

**Infino ASF-9810FL**  
**Lotte Chemical Corporation - Polybutylene Terephthalate**

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

**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	0.040	%
Rear Temperature	428 to 446	°F
Middle Temperature	446 to 464	°F
Front Temperature	464 to 482	°F
Nozzle Temperature	500	°F
Mold Temperature	104 to 176	°F
Injection Pressure	12800	psi
Back Pressure	142 to 427	psi
Screw Speed	50 to 100	rpm

**Injection Notes**

Hot Runner Temperature: 250°C

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

<sup>3</sup> 0.11 in/min

<sup>4</sup> 0.079 in/min

<sup>5</sup> 4mm