

# Infino GP-8200G

Lotte Chemical Corporation - Polyphenylene Ether

## General Information

### General

Filler / Reinforcement	• Glass Fiber
Uses	• Pump Parts

## Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.19		ASTM D792
Density (Natural)	1.19	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (280°C/10.0 kg)	7.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (280°C/10.0 kg)	7.0	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	3.8E-3 to 4.6E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.2E-3 to 5.2E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	713000	psi	ASTM D638
Tensile Modulus	798000	psi	ISO 527-1/50
Tensile Strength <sup>2</sup> (Yield)	15600	psi	ASTM D638
Tensile Stress (Yield)	17400	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Break)	15600	psi	ASTM D638
Tensile Stress (Break)	17400	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	4.0	%	ASTM D638
Tensile Strain (Break)	3.0	%	ISO 527-2/50
Flexural Modulus <sup>3</sup>	853000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	856000	psi	ISO 178
Flexural Strength <sup>3</sup>	21300	psi	ASTM D790
Flexural Stress <sup>4</sup>	24700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	6.2	ft·lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	2.2	ft·lb/in	
73°F, 0.250 in	2.1	ft·lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	6.2	ft·lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	118		ASTM D785
Rockwell Hardness (R-Scale)	121		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	307	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	311	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	284	°F	

## Infino GP-8200G

### Lotte Chemical Corporation - Polyphenylene Ether

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	300	°F	ISO 75-2/A
Vicat Softening Temperature	275 315	°F	ISO 306/B50

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	212	°F
Hot Air Dryer	212	°F
Drying Time		
Desiccant Dryer	2.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.040	%
Rear Temperature	518	°F
Middle Temperature	518 to 554	°F
Front Temperature	554 to 590	°F
Nozzle Temperature	590	°F
Mold Temperature	140 to 176	°F
Injection Pressure	28400	psi
Back Pressure	284 to 569	psi
Screw Speed	200 to 500	rpm

#### Injection Notes

Hot Runner Temperature: 310°C

#### Notes

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

<sup>2</sup> 0.20 in/min

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

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

<sup>5</sup> 4mm