

## Lotte Chemical Corporation - Polycarbonate + PBT

Tuesday, June 27, 2023

General Information				
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Material Status	Commercial: Active			
Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America	
Uses	<ul> <li>Automotive Applications</li> </ul>			

ASTM & ISO Properties <sup>1</sup>				
Physical	Nominal Value	Unit	Test Method	
Density / Specific Gravity (Natural)	1.20	g/cm³	ASTM D792	
Density (Natural)	1.20	g/cm³	ISO 1183	
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	45	g/10 min	ASTM D1238	
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	45	g/10 min	ISO 1133	
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.80	%	ASTM D955	
Molding Shrinkage - Across Flow (3.20 mm)	0.50 to 0.80	%	ASTM D955	
Molding Shrinkage			ISO 294-4	
Across Flow: 2.00 mm	0.50 to 0.80	%		
Flow: 2.00 mm	0.50 to 0.80	%		
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus <sup>2</sup>	1720	MPa	ASTM D638	
Tensile Modulus	1600	MPa	ISO 527-1/50	
Tensile Strength <sup>2</sup> (Yield)	49.0	MPa	ASTM D638	
Tensile Stress (Yield)	50.0	MPa	ISO 527-2/50	
Tensile Strength <sup>2</sup> (Break)	47.1	MPa	ASTM D638	
Tensile Stress (Break)	48.0	MPa	ISO 527-2/50	
Tensile Elongation <sup>2</sup> (Break)	120	%	ASTM D638	
Tensile Strain (Break)	120	%	ISO 527-2/50	
Flexural Modulus <sup>3</sup>	1860	MPa	ASTM D790	
Flexural Modulus <sup>4</sup>	1800	MPa	ISO 178	
Flexural Strength <sup>3</sup>	68.6	MPa	ASTM D790	
Flexural Stress <sup>4</sup>	67.0	MPa	ISO 178	
mpact	Nominal Value	Unit	Test Method	
Charpy Notched Impact Strength <sup>5</sup> (23°C)	54	kJ/m²	ISO 179/1eA	
Notched Izod Impact			ASTM D256	
-30°C, 6.35 mm	370	J/m		
23°C, 3.18 mm	760	J/m		
23°C, 6.35 mm	640	J/m		
Notched Izod Impact Strength <sup>5</sup> (23°C)	52	kJ/m²	ISO 180/1A	
Hardness	Nominal Value	Unit	Test Method	
Rockwell Hardness (R-Scale)	110		ASTM D785	
Rockwell Hardness (R-Scale)	110		ISO 2039-2	



## Infino AE-3063I

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Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ASTM D648
1.8 MPa, Unannealed, 6.40 mm	92.0 °C	
Deflection Temperature Under Load		ISO 75-2/A
1.8 MPa, Unannealed, 4.00 mm	78.0 °C	
Vicat Softening Temperature	120 °C	ISO 306/B50

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature			
Desiccant Dryer	100	°C	
Hot Air Dryer	110	°C	
Drying Time			
Desiccant Dryer	4.0	hr	
Hot Air Dryer	4.0	hr	
Suggested Max Moisture	< 0.050	%	
Rear Temperature	230 to 240	°C	
Middle Temperature	240 to 250	°C	
Front Temperature	250 to 260	°C	
Nozzle Temperature	260	°C	
Mold Temperature	40 to 60	°C	
Injection Pressure	49.0 to 245	MPa	
Back Pressure	0.490 to 1.96	MPa	
Screw Speed	50 to 150	rpm	

**Notes** 

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

<sup>2</sup> 50 mm/min

Hot Runner Temperature: 260°C

<sup>3</sup> 2.8 mm/min

4 2.0 mm/min

<sup>5</sup> 4mm

