

# Starex BF-0950

#### Lotte Chemical Corporation - Methyl Methacrylate / ABS

Wednesday, March 9, 2022

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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				

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Density / Specific Gravity (Natural)	1.11	g/cm³	ASTM D792		
Density (Natural)	1.11	g/cm³	ISO 1183		
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	13	g/10 min	ASTM D1238		
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	13	g/10 min	ISO 1133		
Molding Shrinkage - Flow (3.20 mm)	0.35 to 0.43	%	ASTM D955		
Molding Shrinkage - Across Flow (3.20 mm)	0.37 to 0.45	%	ASTM D955		
Molding Shrinkage			ISO 294-4		
Across Flow : 2.00 mm	0.37 to 0.45	%			
Flow: 2.00 mm	0.35 to 0.43	%			
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus <sup>2</sup>	2500	MPa	ASTM D638		
Tensile Modulus	2600	MPa	ISO 527-1/50		
Tensile Strength <sup>2</sup> (Yield)	51.0	MPa	ASTM D638		
Tensile Stress (Yield)	55.0	MPa	ISO 527-2/50		
Tensile Strength <sup>2</sup> (Break)	34.0	MPa	ASTM D638		
Tensile Stress (Break)	40.0	MPa	ISO 527-2/50		
Tensile Elongation <sup>2</sup> (Break)	25	%	ASTM D638		
Tensile Strain (Break)	20	%	ISO 527-2/50		
Flexural Modulus <sup>3</sup>	2600	MPa	ASTM D790		
Flexural Modulus <sup>4</sup>	2800	MPa	ISO 178		
Flexural Strength <sup>3</sup>	74.0	MPa	ASTM D790		
Flexural Stress <sup>4</sup>	85.0	MPa	ISO 178		
Impact	Nominal Value	Unit	Test Method		
Charpy Notched Impact Strength <sup>5</sup> (23°C)	8.0	kJ/m²	ISO 179/1eA		
Notched Izod Impact			ASTM D256		
23°C, 3.18 mm	110	J/m			
23°C, 6.35 mm	98	J/m			
Notched Izod Impact Strength <sup>5</sup> (23°C)	7.0	kJ/m²	ISO 180/1A		
Hardness	Nominal Value	Unit	Test Method		
Rockwell Hardness (R-Scale)	116		ASTM D785		
Rockwell Hardness (R-Scale)	116		ISO 2039-2		

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Thermal	Nominal Value	Unit	Test Method	
Deflection Temperature Under Load			ASTM D648	
0.45 MPa, Unannealed, 6.40 mm	98.0	°C		
Deflection Temperature Under Load			ISO 75-2/B	
0.45 MPa, Unannealed, 4.00 mm	91.0	°C		
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	100	°C	ISO 306/B50	
Flammability	Nominal Value	Unit	Test Method	
Flame Rating (1.5 to 3.0 mm)	НВ		UL 94	
Additional Information	Nominal Value	Unit	Test Method	
Pencil Hardness <sup>6</sup>	• H		JIS K5401	
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Processing Information				
njection	Nominal Value	Unit		
Drying Temperature				
Desiccant Dryer	80	°C		
Hot Air Dryer	85	°C		
Drying Time				
Desiccant Dryer	4.0	hr		
Hot Air Dryer	4.0	hr		
Suggested Max Moisture	0.050	%		
Rear Temperature	200 to 210	°C		
Middle Temperature	210 to 220	°C		
Front Temperature	230	°C		
Nozzle Temperature	240	°C		
Mold Temperature	60	°C		
Injection Pressure	73.5 to 235	MPa		
Back Pressure	0.490 to 1.96	MPa		
Screw Speed	30 to 70	rpm		
jection Notes	HEIVIIOAL			

Hot Runner Temperature: 240°C

#### Notes

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

<sup>2</sup> 5.0 mm/min

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

<sup>4</sup> 2.0 mm/min

<sup>5</sup> 4mm

<sup>6</sup> 500g

