

Starex BF-0677HF

Lotte Chemical Corporation - Methyl Methacrylate / ABS

General Information

General		
Uses	• Appliances	• Electrical/Electronic Applications

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.13		ASTM D792
Density (Natural)	1.13	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	19	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	19	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	5.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.50	%	
Flow : 0.0787 in	0.40	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	347000	psi	ASTM D638
Tensile Modulus	377000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	6830	psi	ASTM D638
Tensile Stress (Yield)	7690	psi	ISO 527-2/50
Tensile Strength ² (Break)	4270	psi	ASTM D638
Tensile Stress (Break)	5510	psi	ISO 527-2/50
Tensile Elongation ² (Break)	15	%	ASTM D638
Tensile Strain (Break)	20	%	ISO 527-2/50
Flexural Modulus ³	356000	psi	ASTM D790
Flexural Modulus ⁴	377000	psi	ISO 178
Flexural Strength ³	9960	psi	ASTM D790
Flexural Stress ⁴	11600	psi	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	4.8	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	2.2	ft-lb/in	
73°F, 0.250 in	1.7	ft-lb/in	
Notched Izod Impact Strength ⁵ (73°F)	4.8	ft-lb/in ²	ISO 180/1A

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	114		ASTM D785
Rockwell Hardness (R-Scale)	116		ISO 2039-2
Pencil Hardness ⁶	H		JIS K5401

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in	199	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	190	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	183	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	169	°F	ISO 75-2/A
Vicat Softening Temperature			
--	• •	210 208	°F ISO 306/B120
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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		HB	
0.12 in		HB	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	185	°F
Drying Time		
Desiccant Dryer	2.0 to 3.0	hr
Hot Air Dryer	2.0 to 4.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	374 to 392	°F
Middle Temperature	410 to 428	°F
Front Temperature	446 to 464	°F
Nozzle Temperature	464	°F
Mold Temperature	104 to 176	°F
Injection Pressure	7110 to 35600	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 240°C

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.20 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ 4mm

⁶ 500g