



O S T E R M A N

# Starex BF-0370

LOTTE ADVANCED MATERIALS CO., LTD. - Methyl Methacrylate / ABS

Thursday, September 29, 2016

## General Information

### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose		
Uses	• Appliances		

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Specific Gravity (Natural)	1.06		ASTM D792
Density (Natural)	1.06	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	15	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	15	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	348000	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Yield)	6380	psi	ASTM D638
Tensile Stress (Yield)	6530	psi	ISO 527-2/50
Tensile Stress (Break)	6960	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	25	%	ASTM D638
Tensile Strain (Break)	10	%	ISO 527-2/50
Flexural Modulus <sup>3</sup>	363000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	392000	psi	ISO 178
Flexural Strength <sup>3</sup>	10700	psi	ASTM D790
Flexural Stress <sup>4</sup>	13100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	7.6	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	2.8	ft-lb/in	
73°F, 0.250 in	2.4	ft-lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	5.2	ft-lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	113		ASTM D785
Rockwell Hardness (R-Scale)	115		ISO 2039-2
Pencil Hardness <sup>6</sup>	HB		JIS K5401
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi, Unannealed, 0.157 in	205	°F	
Heat Deflection Temperature			ISO 75-2/B
66 psi, Annealed, 0.157 in	219	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	192	°F	

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Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature 264 psi, Unannealed, 0.157 in	183	°F	ISO 75-2/A
Heat Deflection Temperature 264 psi, Annealed, 0.157 in	214	°F	ISO 75-2/A
Vicat Softening Temperature --	216	°F	ISO 306/B50
--	219	°F	ISO 306/B120

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.04 in		HB	
0.06 in		HB	
0.12 in		HB	

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature --	176	°F
Desiccant Dryer	176	°F
Drying Time --	2.0 to 4.0	hr
Desiccant Dryer	2.0 to 3.0	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	446	°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

### 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> Thickness: 4mm

<sup>6</sup> 1000g