



OSTERMAN

Starex BF-0930

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	• Electrical/Electronic Applications	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
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)	33	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	33	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	3.5E-3 to 4.3E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	3.6E-3 to 4.5E-3	in/in	ASTM D955
Molding Shrinkage			ISO 2577
Across Flow : 0.126 in	0.36 to 0.45	%	
Flow : 0.126 in	0.35 to 0.43	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	377000	psi	ASTM D638
Tensile Modulus	421000	psi	ISO 527-2/50
Tensile Strength ² (Yield)	8270	psi	ASTM D638
Tensile Stress (Yield)	10600	psi	ISO 527-2/50
Tensile Strength ² (Break)	5950	psi	ASTM D638
Tensile Stress (Break)	10400	psi	ISO 527-2/50
Tensile Elongation ² (Break)	19	%	ASTM D638
Tensile Strain (Break)	5.0	%	ISO 527-2/50
Flexural Modulus ³	377000	psi	ASTM D790
Flexural Modulus ⁴	435000	psi	ISO 178
Flexural Strength ³	12600	psi	ASTM D790
Flexural Stress ⁴	14500	psi	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	0.95	ft-lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength ⁵ (73°F)	12	ft-lb/in ²	ISO 179/1eU
Notched Izod Impact			ASTM D256
73°F, 0.125 in	0.37	ft-lb/in	
73°F, 0.250 in	0.37	ft-lb/in	
Notched Izod Impact Strength ⁵ (73°F)	0.95	ft-lb/in ²	ISO 180/1A
Unnotched Izod Impact			ASTM D256
73°F, 0.125 in	4.7	ft-lb/in	
73°F, 0.250 in	4.3	ft-lb/in	
Unnotched Izod Impact Strength ⁵ (23°F)	12	ft-lb/in ²	ISO 180/1U

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Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	118		ASTM D785
Rockwell Hardness (R-Scale)	121		ISO 2039-2
Pencil Hardness ⁶	2H		JIS K5401

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in	192	°F	ASTM D648
Heat Deflection Temperature 66 psi, Unannealed, 0.157 in	189	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	174	°F	ASTM D648
Heat Deflection Temperature 264 psi, Unannealed, 0.157 in	169	°F	ISO 75-2/A
Vicat Softening Temperature	201	°F	ISO 306/B50

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

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 Thickness: 4mm

⁶ 500g