Starex BF-0930

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/cm³	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 294-4
Across Flow : 0.0787 in	0.36 to 0.45	%	
Flow : 0.0787 in	0.35 to 0.43	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	373000	psi	ASTM D638
Tensile Modulus	421000	psi	ISO 527-1/50
Tensile Strength [2] (Yield)	8250	psi	ASTM D638
Tensile Stress (Yield)	10600	psi	ISO 527-2/50
Tensile Strength [2] (Break)	5970	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]	12700	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/in²	ISO 179/1eA
Charpy Unnotched Impact Strength [5] (73°F)	12	ft·lb/in²	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/in²	ISO 180/1A
Unnotched Izod Impact			ASTM D4812
23°F, 0.125 in	4.7	ft·lb/in	
23°F, 0.250 in	4.3	ft·lb/in	
Unnotched Izod Impact Strength [5] (73°F)	12	ft·lb/in²	ISO 180/1U
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	118		ASTM D785
Rockwell Hardness (R-Scale)	121		ISO 2039-2

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Hardness	Nominal Value	Unit	Test Method
Pencil Hardness [6]	2H		JIS K5401

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

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	176	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	392 to 410	°F
Middle Temperature	410 to 428	°F
Front Temperature	428 to 446	°F
Nozzle Temperature	446	°F
Mold Temperature	140	°F
Injection Pressure	34100	psi
Back Pressure	71.1 to 284	psi
Screw Speed	30 to 70	rpm

Injection Notes

Hot Runner Temperature: 230°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