

Starex BF-0370

Lotte Chemical Corporation - Methyl Methacrylate / ABS

General Information

General

Uses • Appliances

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.06		ASTM D792
Density (Natural)	1.06	g/cm ³	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 527-1/50
Tensile Strength ² (Yield)	6400	psi	ASTM D638
Tensile Stress (Yield)	6530	psi	ISO 527-2/50
Tensile Stress (Break)	6960	psi	ISO 527-2/50
Tensile Elongation ² (Break)	25	%	ASTM D638
Tensile Strain (Break)	10	%	ISO 527-2/50
Flexural Modulus ³	363000	psi	ASTM D790
Flexural Modulus ⁴	392000	psi	ISO 178
Flexural Strength ³	10700	psi	ASTM D790
Flexural Stress ⁴	13100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	7.6	ft·lb/in ²	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 ⁵ (73°F)	5.2	ft·lb/in ²	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 ⁶	HB		JIS K5401
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	205	°F	ISO 75-2/B
Deflection Temperature Under Load 66 psi, Annealed, 0.157 in	219	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	192	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	183	°F	ISO 75-2/A
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	214	°F	ISO 75-2/A

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Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature			
--	219	°F	ISO 306/B120
--	216	°F	ISO 306/B50
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		
Desiccant Dryer	176	°F
Hot Air Dryer	176	°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	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

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 1000g