

Starex BM-0320JM

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Uses • Automotive Applications

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.04		ASTM D792
Density (Natural)	1.04	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	4.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	4.0	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.30 to 0.60	%	
Flow : 0.0787 in	0.30 to 0.60	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	6680	psi	ASTM D638
Tensile Stress (Yield)	6380	psi	ISO 527-2/50
Tensile Strength ² (Break)	6260	psi	ASTM D638
Tensile Elongation ² (Break)	15	%	ASTM D638
Tensile Strain (Break)	15	%	ISO 527-2/50
Flexural Modulus ³	305000	psi	ASTM D790
Flexural Modulus ⁴	326000	psi	ISO 178
Flexural Strength ³	9390	psi	ASTM D790
Flexural Stress ⁴	10400	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	12	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact (73°F, 0.250 in)	5.3	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	106		ASTM D785
Rockwell Hardness (R-Scale)	106		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	207	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	198	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176 to 194	°F
Hot Air Dryer	176 to 194	°F

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Injection	Nominal Value	Unit
Drying Time		
Desiccant Dryer	3.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	< 0.10	%
Rear Temperature	356 to 410	°F
Middle Temperature	374 to 428	°F
Front Temperature	410 to 446	°F
Nozzle Temperature	428 to 482	°F
Mold Temperature	104 to 176	°F
Injection Pressure	7110 to 21300	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 230 to 260°C