Starex BM-0320JM

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

Wednesday, March 9, 2022

General Information

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

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.04	g/cm³	ASTM D792
Density (Natural)	1.04	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	6.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	6.0	g/10 min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.30 to 0.60	%	ASTM D955
Molding Shrinkage - Across Flow (3.20 mm)	0.30 to 0.60	%	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 2.00 mm	0.30 to 0.60	%	
Flow : 2.00 mm	0.30 to 0.60	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield)	46.0	MPa	ASTM D638
Tensile Stress (Yield)	44.0	MPa	ISO 527-2/50
Tensile Strength [2] (Break)	43.0	MPa	ASTM D638
Tensile Elongation [2] (Break)	15	%	ASTM D638
Tensile Strain (Break)	15	%	ISO 527-2/50
Flexural Modulus [3]	2100	MPa	ASTM D790
Flexural Modulus [4]	2250	MPa	ISO 178
Flexural Strength [3]	65.0	MPa	ASTM D790
Flexural Stress [4]	72.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [5] (23°C)	25	kJ/m²	ISO 179/1eA
Notched Izod Impact (23°C, 6.35 mm)	280	J/m	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
0.45 MPa, Unannealed, 4.00 mm	97.0	°C	
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm	92.0	°C	

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	80 to 90	°C
Hot Air Dryer	80 to 90	°C
Drying Time		
Desiccant Dryer	3.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	< 0.10	%
Rear Temperature	180 to 210	°C
Middle Temperature	190 to 220	°C
Front Temperature	210 to 230	°C
Nozzle Temperature	220 to 250	°C
Mold Temperature	40 to 80	°C
Injection Pressure	49.0 to 147	MPa
Back Pressure	0.490 to 1.96	MPa
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 230 to 260°C

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 50 mm/min

[3] 2.8 mm/min

[4] 2.0 mm/min

[5] 4mm