

Starex SR-0320BM

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Uses • Automotive Applications • Electrical/Electronic 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)	3.5	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	3.5	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	319000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	6120	psi	ASTM D638
Tensile Stress (Yield)	6240	psi	ISO 527-2/50
Tensile Stress (Break)	5080	psi	ISO 527-2/50
Tensile Strain (Break)	18	%	ISO 527-2/50
Flexural Modulus ³	290000	psi	ASTM D790
Flexural Modulus ⁴	334000	psi	ISO 178
Flexural Strength ³	9100	psi	ASTM D790
Flexural Stress ⁴	10600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	10	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact (73°F, 0.250 in)	3.4	ft·lb/in	ASTM D256
Notched Izod Impact Strength ⁵ (73°F)	10	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ASTM D785
Rockwell Hardness (R-Scale)	106		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	219	°F	ISO 75-2/B
Deflection Temperature Under Load 66 psi, Annealed, 0.157 in	230	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	201	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	192	°F	ISO 75-2/A
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	221	°F	ISO 75-2/A
Vicat Softening Temperature --	232	°F	ISO 306/B120
--	226	°F	ISO 306/B50

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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	320 to 356	°F
Middle Temperature	374 to 392	°F
Front Temperature	410 to 428	°F
Nozzle Temperature	446	°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°C