

Starex LX-0951

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Uses • Appliances

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.05		ASTM D792
Density (Natural)	1.05	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	29	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	29	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	3.4E-3 to 4.2E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	3.5E-3 to 4.3E-3	in/in	ASTM D955
Molding Shrinkage - Flow	0.34 to 0.42	%	ISO 294-4
Water Absorption (Saturation, 73°F)	0.050	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	343000	psi	ASTM D638
Tensile Modulus	363000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	6540	psi	ASTM D638
Tensile Stress (Yield)	7250	psi	ISO 527-2/50
Tensile Strength ² (Break)	5800	psi	ASTM D638
Tensile Stress (Break)	5800	psi	ISO 527-2/50
Tensile Elongation ² (Break)	14	%	ASTM D638
Tensile Strain (Break)	9.5	%	ISO 527-2/50
Flexural Modulus ³	348000	psi	ASTM D790
Flexural Modulus ⁴	377000	psi	ISO 178
Flexural Strength ³	9810	psi	ASTM D790
Flexural Stress ⁴	11500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	7.1	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	2.6	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	6.7	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	108		ASTM D785
Rockwell Hardness (R-Scale)	111		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	194	°F	ISO 75-2/B
Deflection Temperature Under Load 66 psi, Annealed, 0.157 in	210	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	185	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	171	°F	ISO 75-2/A
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	203	°F	ISO 75-2/A
Vicat Softening Temperature --	210	°F	ISO 306/B120
--	205	°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	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