

Starex SL-0100

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Uses • Sheet

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.03		ASTM D792
Density (Natural)	1.03	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	7.5	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	7.5	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.40 to 0.70	%	
Flow : 0.0787 in	0.40 to 0.70	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	247000	psi	ASTM D638
Tensile Modulus	247000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	4690	psi	ASTM D638
Tensile Stress (Yield)	5080	psi	ISO 527-2/50
Tensile Strength ² (Break)	6540	psi	ASTM D638
Tensile Stress (Break)	7110	psi	ISO 527-2/50
Tensile Elongation ² (Break)	80	%	ASTM D638
Tensile Strain (Break)	74	%	ISO 527-2/50
Flexural Modulus ³	232000	psi	ASTM D790
Flexural Modulus ⁴	261000	psi	ISO 178
Flexural Strength ³	6400	psi	ASTM D790
Flexural Stress ⁴	8270	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	5.2	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.3	ft·lb/in	
73°F, 0.250 in	1.1	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	5.7	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	97		ASTM D785
Rockwell Hardness (R-Scale)	93		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in	205	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	198	°F	ISO 75-2/B
Deflection Temperature Under Load 66 psi, Annealed, 0.157 in	217	°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	212	°F	ISO 75-2/A
Vicat Softening Temperature --	212	°F	ISO 306/B120
--	207	°F	ISO 306/B50

Flammability	Nominal Value	Unit	Test Method
Flame Rating 0.06 in	HB		UL 94
0.13 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	hr
Hot Air Dryer	2.0	hr
Suggested Max Moisture	< 0.070	%
Rear Temperature	356 to 374	°F
Middle Temperature	374	°F
Front Temperature	392	°F
Nozzle Temperature	428	°F
Mold Temperature	104 to 122	°F
Injection Pressure	7110 to 29900	psi
Back Pressure	71.1 to 284	psi
Screw Speed	30 to 70	rpm

Injection Notes

Hot Runner Temperature: 230°C