

Starex SV-0165 U

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Uses • Industrial Applications • Sheet

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)	8.2	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	8.2	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	5.0E-3 to 6.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	5.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	341000	psi	ASTM D638
Tensile Modulus	377000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	5690	psi	ASTM D638
Tensile Stress (Yield)	6530	psi	ISO 527-2/50
Tensile Strength ² (Break)	5260	psi	ASTM D638
Tensile Stress (Break)	5510	psi	ISO 527-2/50
Tensile Elongation ² (Break)	20	%	ASTM D638
Tensile Strain (Break)	12	%	ISO 527-2/50
Flexural Modulus ³	370000	psi	ASTM D790
Flexural Modulus ⁴	392000	psi	ISO 178
Flexural Strength ³	11000	psi	ASTM D790
Flexural Stress ⁴	11600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	8.6	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	4.6	ft·lb/in	
73°F, 0.250 in	4.0	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	9.5	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	109		ASTM D785
Rockwell Hardness (R-Scale)	109		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	208	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	201	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Annealed, 0.157 in	217	°F	

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	190	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	178	°F	ISO 75-2/A
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	210	°F	ISO 75-2/A
Vicat Softening Temperature			
--	217	°F	ISO 306/B120
--	212	°F	ISO 306/B50

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		HB	
0.12 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	4.0	hr
Suggested Max Moisture	0.010	%
Rear Temperature	392 to 410	°F
Middle Temperature	410 to 428	°F
Front Temperature	428 to 446	°F
Nozzle Temperature	446	°F
Mold Temperature	140 to 176	°F
Injection Pressure	1710	psi
Back Pressure	569 to 1710	psi
Screw Speed	30 to 100	rpm

Injection Notes
Hot Runner Temperature: 220 to 230°C

Notes

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

² 0.20 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ 4mm