

Starex SR-0315 V

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General			
Uses	• 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)	26	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	26	g/10 min	ISO 1133
Molding Shrinkage - Across Flow (0.126 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	319000	psi	ASTM D638
Tensile Modulus	334000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	5690	psi	ASTM D638
Tensile Stress (Yield)	6090	psi	ISO 527-2/50
Tensile Strength ² (Break)	4690	psi	ASTM D638
Tensile Stress (Break)	4790	psi	ISO 527-2/50
Tensile Elongation ² (Break)	41	%	ASTM D638
Tensile Strain (Break)	32	%	ISO 527-2/50
Flexural Modulus ³	319000	psi	ASTM D790
Flexural Modulus ⁴	363000	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)	11	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	4.7	ft·lb/in	
73°F, 0.250 in	3.9	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	11	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	109		ASTM D785
Rockwell Hardness (R-Scale)	108		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	210	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	199	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	194	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	176	°F	

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Thermal		Nominal Value	Unit	Test Method
Vicat Softening Temperature				
--	•	219	°F	ISO 306/B120
	•	216		
--	•	216	°F	ISO 306/B50
	•	212		

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		< 0.10	%
Rear Temperature		392 to 410	°F
Middle Temperature		410 to 428	°F
Front Temperature		428 to 446	°F
Nozzle Temperature		446	°F
Mold Temperature		104 to 176	°F
Injection Pressure		12800	psi
Back Pressure		142 to 284	psi
Screw Speed		50 to 90	rpm

Injection Notes

Hot Runner Temperature: 230°C