

Starex LX-9140

Lotte Chemical Corporation - Acrylonitrile Styrene Acrylate

General Information

General			
Uses	• Appliances	• Electrical/Electronic Applications	
Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.06		ASTM D792
Density (Natural)	1.06	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	3.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	3.0	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.4E-3 to 5.3E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.6E-3 to 5.7E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.46 to 0.57	%	
Flow : 0.0787 in	0.44 to 0.53	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	276000	psi	ASTM D638
Tensile Modulus	290000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	6120	psi	ASTM D638
Tensile Stress (Yield)	6530	psi	ISO 527-2/50
Tensile Strength ² (Break)	6400	psi	ASTM D638
Tensile Stress (Break)	4930	psi	ISO 527-2/50
Tensile Elongation ² (Break)	110	%	ASTM D638
Tensile Strain (Break)	18	%	ISO 527-2/50
Flexural Modulus ³	270000	psi	ASTM D790
Flexural Modulus ⁴	290000	psi	ISO 178
Flexural Strength ³	8250	psi	ASTM D790
Flexural Stress ⁴	9570	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	4.3	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.8	ft·lb/in	
73°F, 0.250 in	1.1	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	2.9	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	96		ASTM D785
Rockwell Hardness (R-Scale)	96		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.252 in	205	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	196	°F	

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	183	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	171	°F	ISO 75-2/A
Vicat Softening Temperature	203	°F	ISO 306/B50

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	212	°F
Hot Air Dryer	212	°F
Drying Time		
Desiccant Dryer	2.0	hr
Hot Air Dryer	2.0	hr
Suggested Max Moisture	0.050 to 0.070	%
Rear Temperature	446	°F
Middle Temperature	482	°F
Front Temperature	482	°F
Nozzle Temperature	482	°F
Mold Temperature	122 to 176	°F
Injection Pressure	13500	psi
Back Pressure	71.1 to 427	psi
Screw Speed	50 to 100	rpm

Injection Notes

Hot Runner Temperature: 250°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