

Starex WX-9951N

Lotte Chemical Corporation - Acrylonitrile Styrene Acrylate + Acrylic (PMMA)

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.13		ASTM D792
Density (Natural)	1.13	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	9.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	9.0	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	348000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	7110	psi	ASTM D638
Tensile Stress (Yield)	6530	psi	ISO 527-2/50
Tensile Elongation ² (Break)	10	%	ASTM D638
Tensile Strain (Break)	10	%	ISO 527-2/50
Flexural Modulus ³	299000	psi	ASTM D790
Flexural Modulus ⁴	305000	psi	ISO 178
Flexural Strength ³	9960	psi	ASTM D790
Flexural Stress ⁴	10400	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	4.5	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.7	ft-lb/in	
73°F, 0.250 in	1.6	ft-lb/in	
Notched Izod Impact Strength ⁵ (73°F)	4.3	ft-lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	112		ASTM D785
Rockwell Hardness (R-Scale)	112		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	205	°F	ISO 306/B50

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	176	°F

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Injection	Nominal Value	Unit
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	374 to 401	°F
Middle Temperature	401 to 437	°F
Front Temperature	437 to 473	°F
Nozzle Temperature	473	°F
Mold Temperature	122 to 158	°F
Injection Pressure	14200	psi
Back Pressure	142 to 284	psi
Screw Speed	50 to 90	rpm

Injection Notes

Hot Runner Temperature: 230 to 250 °C

Notes

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

² 2.0 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ 4mm