

# Starex WX-9950U

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	

## Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method	
Density / Specific Gravity (Natural)	1.15		ASTM D792	
Density (Natural)	1.15	g/cm <sup>3</sup>	ISO 1183	
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	5.5	g/10 min	ASTM D1238	
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	5.5	g/10 min	ISO 1133	
Molding Shrinkage - Flow (0.126 in)	4.5E-3 to 7.5E-3	in/in	ASTM D955	
Molding Shrinkage - Across Flow (0.126 in)	4.5E-3 to 7.5E-3	in/in	ASTM D955	
Molding Shrinkage			ISO 294-4	
Across Flow : 0.0787 in	0.45 to 0.75	%		
Flow : 0.0787 in	0.45 to 0.75	%		
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus <sup>2</sup>	320000	psi	ASTM D638	
Tensile Modulus	331000	psi	ISO 527-1/50	
Tensile Strength <sup>2</sup> (Yield)	7540	psi	ASTM D638	
Tensile Stress (Yield)	7540	psi	ISO 527-2/50	
Tensile Strength <sup>2</sup> (Break)	7110	psi	ASTM D638	
Tensile Stress (Break)	7110	psi	ISO 527-2/50	
Tensile Elongation <sup>2</sup> (Break)	30	%	ASTM D638	
Tensile Strain (Break)	30	%	ISO 527-2/50	
Flexural Modulus <sup>3</sup>	292000	psi	ASTM D790	
Flexural Modulus <sup>4</sup>	319000	psi	ISO 178	
Flexural Strength <sup>3</sup>	9670	psi	ASTM D790	
Flexural Stress <sup>4</sup>	10900	psi	ISO 178	
Impact	Nominal Value	Unit	Test Method	
Charpy Notched Impact Strength <sup>5</sup> (73°F)	3.6	ft·lb/in <sup>2</sup>	ISO 179/1eA	
Notched Izod Impact			ASTM D256	
73°F, 0.125 in	1.4	ft·lb/in		
73°F, 0.250 in	1.2	ft·lb/in		
Notched Izod Impact Strength <sup>5</sup> (73°F)	3.3	ft·lb/in <sup>2</sup>	ISO 180/1A	
Hardness	Nominal Value	Unit	Test Method	
Rockwell Hardness (R-Scale)	114		ASTM D785	
Rockwell Hardness (R-Scale)	113		ISO 2039-2	
Thermal	Nominal Value	Unit	Test Method	
Deflection Temperature Under Load			ASTM D648	
264 psi, Unannealed, 0.252 in	185	°F		
Deflection Temperature Under Load			ISO 75-2/A	
264 psi, Unannealed, 0.157 in	167	°F		
Vicat Softening Temperature	• •	208 208	°F °F	ISO 306/B50

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### Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	194	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	< 0.10	%
Rear Temperature	428 to 446	°F
Middle Temperature	446 to 464	°F
Front Temperature	464 to 482	°F
Nozzle Temperature	482	°F
Mold Temperature	104 to 176	°F
Injection Pressure	12800	psi
Back Pressure	284 to 996	psi
Screw Speed	30 to 80	rpm

### Injection Notes

Hot Runner Temperature: 220 °C

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

<sup>3</sup> 0.11 in/min

<sup>4</sup> 0.079 in/min

<sup>5</sup> 4mm