

Starex WR-9310

Lotte Chemical Corporation - Acrylonitrile Styrene Acrylate

General Information

General	
Features	<ul style="list-style-type: none"> • Good Heat Resistance
Uses	<ul style="list-style-type: none"> • Automotive Applications

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.07		ASTM D792
Density (Natural)	1.07	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	10	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	10	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 ²	290000	psi	ASTM D638
Tensile Modulus	319000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	6540	psi	ASTM D638
Tensile Stress (Yield)	6380	psi	ISO 527-2/50
Tensile Strength ² (Break)	5370	psi	ASTM D638
Tensile Stress (Break)	5370	psi	ISO 527-2/50
Tensile Elongation ² (Break)	46	%	ASTM D638
Tensile Strain (Break)	17	%	ISO 527-2/50
Flexural Modulus ³	305000	psi	ASTM D790
Flexural Modulus ⁴	334000	psi	ISO 178
Flexural Strength ³	8700	psi	ASTM D790
Flexural Stress ⁴	10200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	8.1	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact (73°F, 0.125 in)	4.3	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	108		ASTM D785
Rockwell Hardness (R-Scale)	108		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	190	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	172	°F	
Vicat Softening Temperature	208	°F	ISO 306/B50

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	167 to 185	°F
Hot Air Dryer	167 to 185	°F
Drying Time		
Desiccant Dryer	2.0 to 4.0	hr
Hot Air Dryer	2.0 to 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	71.1 to 284	psi
Screw Speed	50 to 90	rpm

Injection Notes

Hot Runner Temperature: 230 to 260°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