

Starex WR-9100

Lotte Chemical Corporation - Acrylonitrile Styrene Acrylate

General Information

General

Uses • Construction Applications

Properties¹

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)	22	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	22	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 7.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	6530	psi	ASTM D638
Tensile Stress (Yield)	6530	psi	ISO 527-2/50
Tensile Elongation ² (Break)	80	%	ASTM D638
Flexural Modulus ³	290000	psi	ASTM D790
Flexural Modulus ⁴	348000	psi	ISO 178
Flexural Strength ³	8560	psi	ASTM D790
Flexural Stress ⁴	10900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	5.7	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact (73°F, 0.125 in)	3.7	ft·lb/in	ASTM D256
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)	102		ASTM D785
Rockwell Hardness (R-Scale)	107		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	185	°F	ASTM D648
Vicat Softening Temperature	205 207	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		HB	
0.12 in		HB	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	176 to 194	°F

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Injection	Nominal Value	Unit
Drying Time		
Desiccant Dryer	2.0 to 3.0	hr
Hot Air Dryer	2.0 to 4.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	356 to 374	°F
Middle Temperature	392 to 410	°F
Front Temperature	428 to 446	°F
Nozzle Temperature	464	°F
Mold Temperature	104 to 176	°F
Injection Pressure	7110 to 35600	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 240°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