

Starex WR-0790

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Features	<ul style="list-style-type: none"> • UV Resistant
Uses	<ul style="list-style-type: none"> • Appliances
Forms	<ul style="list-style-type: none"> • Pellets
Processing Method	<ul style="list-style-type: none"> • Injection Molding

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)	30	g/10 min	ASTM D1238	
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	30	g/10 min	ISO 1133	
Molding Shrinkage - Flow (0.126 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955	
Molding Shrinkage - Across Flow (0.126 in)	3.0E-3 to 6.0E-3	in/in	ASTM D955	
Molding Shrinkage			ISO 294-4	
Across Flow : 0.0787 in	0.30 to 0.60	%		
Flow : 0.0787 in	0.30 to 0.60	%		
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus	334000	psi	ISO 527-1/50	
Tensile Strength ² (Yield)	6400	psi	ASTM D638	
Tensile Stress (Yield)	6530	psi	ISO 527-2/50	
Flexural Modulus ³	313000	psi	ASTM D790	
Flexural Modulus ³	319000	psi	ISO 178	
Flexural Strength ³	9250	psi	ASTM D790	
Flexural Stress ³	10200	psi	ISO 178	
Impact	Nominal Value	Unit	Test Method	
Charpy Notched Impact Strength ⁴ (73°F)	9.5	ft·lb/in ²	ISO 179/1eA	
Notched Izod Impact			ASTM D256	
73°F, 0.125 in	4.4	ft·lb/in		
73°F, 0.250 in	3.7	ft·lb/in		
Notched Izod Impact Strength ⁴ (73°F)	8.6	ft·lb/in ²	ISO 180/1A	
Hardness	Nominal Value	Unit	Test Method	
Rockwell Hardness (R-Scale)	110		ASTM D785	
Rockwell Hardness (R-Scale)	110		ISO 2039-2	
Thermal	Nominal Value	Unit	Test Method	
Deflection Temperature Under Load			ASTM D648	
264 psi, Unannealed, 0.252 in	167	°F		
Deflection Temperature Under Load			ISO 75-2/A	
264 psi, Unannealed, 0.157 in	165	°F		
Vicat Softening Temperature	• •	201 199	°F °F	ISO 306/B50

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	176	°F
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	320 to 356	°F
Middle Temperature	374 to 392	°F
Front Temperature	410 to 428	°F
Nozzle Temperature	446	°F
Mold Temperature	104 to 176	°F
Injection Pressure	7110 to 21300	psi
Back Pressure	71.1 to 284	psi
Screw Speed	50 to 150	rpm

Injection Notes

Hot Runner Temperature: 230 °C

Notes

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

² 0.20 in/min

³ 0.11 in/min

⁴ 4mm