

Starex PT-0180

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Uses • Automotive Applications

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.04		ASTM D792
Density (Natural)	1.04	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.6	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.6	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	%	
Water Absorption (Saturation, 73°F)	0.30	%	ASTM D570
Water Absorption (Saturation, 73°F)	0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	319000	psi	ASTM D638
Tensile Modulus	319000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	5690	psi	ASTM D638
Tensile Stress (Yield)	6090	psi	ISO 527-2/50
Tensile Stress (Break)	5080	psi	ISO 527-2/50
Flexural Modulus ³	290000	psi	ASTM D790
Flexural Modulus ⁴	348000	psi	ISO 178
Flexural Strength ³	8680	psi	ASTM D790
Flexural Stress ⁴	10900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	11	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact (73°F, 0.250 in)	3.7	ft-lb/in	ASTM D256
Notched Izod Impact Strength ⁵ (73°F)	9.5	ft-lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	106		ASTM D785
Rockwell Hardness (R-Scale)	106		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	207	°F	ISO 306/B50

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	185 to 203	°F
Hot Air Dryer	185 to 203	°F

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Drying Time		
Desiccant Dryer	2.0 to 3.0	hr
Hot Air Dryer	3.0 to 4.0	hr
Suggested Max Moisture	< 0.10	%
Rear Temperature	356 to 392	°F
Middle Temperature	392 to 410	°F
Front Temperature	410 to 446	°F
Nozzle Temperature	428 to 464	°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: 210 to 230°C