

Starex SD-0150 U

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

General Information

General

Additive	• UV Stabilizer
Features	• UV Stabilized
Uses	• Appliances
RoHS Compliance	• RoHS Compliant

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)			ASTM D1238
200°C/5.0 kg	1.7	g/10 min	
220°C/10.0 kg	20	g/10 min	
Melt Mass-Flow Rate (MFR)			ISO 1133
200°C/5.0 kg	1.7	g/10 min	
220°C/10.0 kg	20	g/10 min	
Molding Shrinkage - Flow (0.126 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	2.0E-3 to 5.0E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.20 to 0.50	%	
Flow : 0.0787 in	0.20 to 0.50	%	

Mechanical

	Nominal Value	Unit	Test Method
Tensile Modulus ²	290000	psi	ASTM D638
Tensile Modulus	348000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	5830	psi	ASTM D638
Tensile Stress (Yield)	5950	psi	ISO 527-2/50
Tensile Strength ² (Break)	6400	psi	ASTM D638
Tensile Stress (Break)	5080	psi	ISO 527-2/50
Tensile Elongation ² (Break)	15	%	ASTM D638
Tensile Strain (Break)	14	%	ISO 527-2/50
Flexural Modulus ³	305000	psi	ASTM D790
Flexural Modulus ⁴	305000	psi	ISO 178
Flexural Strength ³	8390	psi	ASTM D790
Flexural Stress ⁴	8560	psi	ISO 178

Impact

	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	13	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	5.3	ft-lb/in	
73°F, 0.250 in	4.5	ft-lb/in	
Notched Izod Impact Strength ⁵ (73°F)	11	ft-lb/in ²	ISO 180/1A

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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 66 psi, Unannealed, 0.252 in	203	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	196	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	181	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	172	°F	ISO 75-2/A
Vicat Softening Temperature	208	°F	ISO 306/B50
Optical	Nominal Value	Unit	Test Method
Yellowness Index (0.126 in)	18	YI	ASTM D1925

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