

Starex EG-7000

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene + PET

General Information

General

Uses • Appliances

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.08		ASTM D792
Density (Natural)	1.08	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	35	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	35	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.4E-3 to 5.4E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.6E-3 to 5.7E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.46 to 0.57	%	
Flow : 0.0787 in	0.44 to 0.54	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	266000	psi	ASTM D638
Tensile Modulus	290000	psi	ISO 527-1/50
Tensile Strength ² (Yield)	5550	psi	ASTM D638
Tensile Stress (Yield)	5510	psi	ISO 527-2/50
Tensile Strength ² (Break)	4120	psi	ASTM D638
Tensile Stress (Break)	3770	psi	ISO 527-2/50
Tensile Elongation ² (Break)	40	%	ASTM D638
Tensile Strain (Break)	18	%	ISO 527-2/50
Flexural Modulus ³	284000	psi	ASTM D790
Flexural Modulus ⁴	284000	psi	ISO 178
Flexural Strength ³	8110	psi	ASTM D790
Flexural Stress ⁴	7980	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁵ (73°F)	9.5	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	3.9	ft·lb/in	
73°F, 0.250 in	3.7	ft·lb/in	
Notched Izod Impact Strength ⁵ (73°F)	10	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	95		ASTM D785
Rockwell Hardness (R-Scale)	95		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.157 in	172	°F	ISO 75-2/B
Deflection Temperature Under Load 66 psi, Annealed, 0.157 in	207	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed, 0.126 in	172	°F	ASTM D648
264 psi, Unannealed, 0.252 in	172	°F	
Deflection Temperature Under Load 264 psi, Unannealed, 0.157 in	172	°F	ISO 75-2/A
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	190	°F	ISO 75-2/A
Vicat Softening Temperature --	196	°F	ISO 306/B120
--	194	°F	ISO 306/B50

Flammability	Nominal Value	Unit	Test Method
Flame Rating 0.06 in		HB	UL 94
0.12 in		HB	

Optical	Nominal Value	Unit	Test Method
Yellowness Index (0.126 in)	20	YI	ASTM D1925

Processing Information

Injection	Nominal Value	Unit
Drying Temperature Desiccant Dryer	212	°F
Hot Air Dryer	212	°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	428 to 446	°F
Middle Temperature	446 to 464	°F
Front Temperature	464 to 482	°F
Nozzle Temperature	473	°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 2.0 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ 4mm