

# Starex GC-0710

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene + PET

## General Information

General			
Uses	• Electrical/Electronic Applications		
Properties <sup>1</sup>			
Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.12		ASTM D792
Density (Natural)	1.12	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage - Flow (0.126 in)	4.4E-3 to 5.4E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.7E-3 to 5.7E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.47 to 0.57	%	
Flow : 0.0787 in	0.44 to 0.54	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	247000	psi	ASTM D638
Tensile Modulus	290000	psi	ISO 527-1/50
Tensile Strength <sup>2</sup> (Yield)	5830	psi	ASTM D638
Tensile Stress (Yield)	5800	psi	ISO 527-2/50
Tensile Stress (Break)	5080	psi	ISO 527-2/50
Tensile Elongation <sup>2</sup> (Break)	40	%	ASTM D638
Tensile Strain (Break)	7.0	%	ISO 527-2/50
Flexural Modulus <sup>3</sup>	272000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	276000	psi	ISO 178
Flexural Strength <sup>3</sup>	8820	psi	ASTM D790
Flexural Stress <sup>4</sup>	8700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	2.5	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	5.1	ft-lb/in	
73°F, 0.250 in	2.2	ft-lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	2.4	ft-lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	96		ASTM D785
Rockwell Hardness (R-Scale)	100		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Unannealed, 0.157 in	181	°F	
Deflection Temperature Under Load			ISO 75-2/B
66 psi, Annealed, 0.157 in	205	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	176	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	158	°F	

## Starex GC-0710

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene + PET

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Annealed, 0.157 in	185	°F	ISO 75-2/A
Vicat Softening Temperature			
--	207	°F	ISO 306/B120
--	201	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	HB		
0.12 in	HB		
Optical	Nominal Value	Unit	Test Method
Yellowness Index (0.126 in)	25	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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

<sup>3</sup> 0.11 in/min

<sup>4</sup> 0.079 in/min

<sup>5</sup> 4mm