

# Starex HF-0680

Lotte Chemical Corporation - Acrylonitrile Butadiene Styrene

## General Information

### General

Uses • Electrical/Electronic Applications

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.04		ASTM D792
Density (Natural)	1.04	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.5	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.5	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup> (Yield)	5970	psi	ASTM D638
Tensile Stress (Yield)	5800	psi	ISO 527-2/50
Flexural Modulus <sup>3</sup>	299000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	276000	psi	ISO 178
Flexural Strength <sup>3</sup>	8960	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)	8.6	ft·lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact (73°F, 0.250 in)	3.7	ft·lb/in	ASTM D256
Notched Izod Impact Strength <sup>5</sup> (73°F)	9.5	ft·lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ASTM D785
Rockwell Hardness (R-Scale)	107		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in	185	°F	ASTM D648
Vicat Softening Temperature	207	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

## 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

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Injection	Nominal Value	Unit
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