

LG ASA LI970

LG Chem Ltd. - Acrylonitrile Styrene Acrylate

Friday, May 24, 2019

General Information

Product Description

Description

- Good Weatherability, Scratch Resistance

Application

- Window Profile, Siding, Automotive

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Features	• Good Scratch Resistance	• Weather Resistant
Uses	• Automotive Applications • Profiles	• Siding Applications • Windows & Doors
Processing Method	• Coextrusion	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.12	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	12	g/10 min	ASTM D1238
Molding Shrinkage - Flow (23°C, 3.20 mm, Injection Molded)	0.40 to 0.70	%	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ³ (23°C, 3.20 mm, Injection Molded)	2040	MPa	ASTM D638
Tensile Strength ³			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	46.0	MPa	
Tensile Elongation ³			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	> 6.0	%	
Tensile Elongation ³			ASTM D638
Break, 23°C, 3.20 mm, Injection Molded	> 15	%	
Flexural Modulus ⁴ (23°C, 3.20 mm, Injection Molded)	2150	MPa	ASTM D790
Flexural Strength ⁴ (23°C, 3.20 mm, Injection Molded)	75.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-30°C, 3.20 mm, Injection Molded	40	J/m	
-30°C, 6.40 mm, Injection Molded	40	J/m	
23°C, 3.20 mm, Injection Molded	180	J/m	
23°C, 6.40 mm, Injection Molded	130	J/m	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	103		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm, Injection Molded	82.0	°C	
Vicat Softening Temperature	90.0	°C	ASTM D1525 ⁵

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	2.0 to 3.0	hr
Minimum Moisture Content	0.010	%
Rear Temperature	180 to 200	°C
Middle Temperature	190 to 210	°C
Front Temperature	210 to 220	°C
Nozzle Temperature	210 to 220	°C
Processing (Melt) Temp	200 to 230	°C
Mold Temperature	40 to 80	°C
Back Pressure ⁶	0.490 to 0.981	MPa
Screw Speed	50 to 100	rpm

Extrusion	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	2.0 to 3.0	hr
Cylinder Zone 1 Temp.	190 to 200	°C
Cylinder Zone 2 Temp.	200 to 220	°C
Cylinder Zone 3 Temp.	210 to 230	°C
Cylinder Zone 4 Temp.	210 to 230	°C
Adapter Temperature	210 to 230	°C
Melt Temperature	200 to 230	°C
Die Temperature	210 to 250	°C

Extrusion Notes

Minimum Moisture Content: 0.01%

Roll Stack Temperature, Top: 70 to 90°C

Roll Stack Temperature, Middle: 70 to 90°C

Roll Stack Temperature, Bottom: 70 to 100°C

Notes

¹ Typical properties: these are not to be construed as specifications.

² 23°C

³ 50 mm/min

⁴ 15 mm/min

⁵ Rate A (50°C/h), Loading 2 (50 N)

⁶ Hydraulic Type