

LG ABS HF380I

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Friday, May 24, 2019

General Information

Product Description

Description

- High Flow, Paintable

Application

- Painting products, Miscellaneous Goods

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
	• Europe		
Features	• High Flow	• Paintable	
Processing Method	• Injection Molding		

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.04	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	38	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)	2100	MPa	ASTM D638
Tensile Strength ³			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	43.0	MPa	
Tensile Elongation ³			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	> 5.0	%	
Tensile Elongation ³			ASTM D638
Break, 23°C, 3.20 mm, Injection Molded	> 10	%	
Flexural Modulus ⁴ (23°C, 3.20 mm, Injection Molded)	2400	MPa	ASTM D790
Flexural Strength ⁴ (23°C, 3.20 mm, Injection Molded)	70.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-30°C, 3.20 mm, Injection Molded	110	J/m	
-30°C, 6.40 mm, Injection Molded	110	J/m	
23°C, 3.20 mm, Injection Molded	270	J/m	
23°C, 6.40 mm, Injection Molded	270	J/m	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	106		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm, Injection Molded	85.0	°C	
Vicat Softening Temperature	93.0	°C	ASTM D1525 ⁵
RTI Elec	60.0	°C	UL 746
RTI Imp	60.0	°C	UL 746

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Thermal	Nominal Value	Unit	Test Method
RTI Str	60.0	°C	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.5 mm		HB	
3.0 mm		HB	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	70 to 80	°C
Drying Time	2.0 to 4.0	hr
Rear Temperature	180 to 200	°C
Middle Temperature	190 to 210	°C
Front Temperature	200 to 220	°C
Nozzle Temperature	200 to 230	°C
Processing (Melt) Temp	210 to 240	°C
Mold Temperature	40 to 70	°C
Back Pressure	0.490 to 1.47	MPa
Screw Speed	30 to 60	rpm

Injection Notes

Minimum Moisture Content: 0.01%

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)