

LG ABS AF365

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Monday, March 7, 2022

General Information

Product Description

Flame Retardant, Heat resistant

Application

Electric parts, IT/OA device
TV, monitor housing

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Features	• Flame Retardant	• Good Heat Resistance
Uses	• Electrical Parts	• Television Housings
RoHS Compliance	• RoHS Compliant	
Processing Method	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.19	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	30	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 ² (23°C, 3.20 mm, Injection Molded)	2060	MPa	ASTM D638
Tensile Strength ³			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	44.1	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	> 20	%	
Flexural Modulus ⁴ (23°C, 6.40 mm, Injection Molded)	2550	MPa	ASTM D790
Flexural Strength ⁴ (23°C, 6.40 mm, Injection Molded)	73.5	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-30°C, 3.20 mm, Injection Molded	78	J/m	
-30°C, 6.40 mm, Injection Molded	59	J/m	
23°C, 3.20 mm, Injection Molded	240	J/m	
23°C, 6.40 mm, Injection Molded	180	J/m	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	108		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 6.40 mm, Injection Molded	92.0	°C	
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm, Injection Molded	86.0	°C	

UL and the UL logo are trademarks of UL LLC © 2022. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

LG ABS AF365

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	93.0	°C	ASTM D1525 ⁵
RTI Elec (1.8 to 3.0 mm)	75.0	°C	UL 746B
RTI Imp (1.8 to 3.0 mm)	75.0	°C	UL 746B
RTI Str (1.8 to 3.0 mm)	75.0	°C	UL 746B

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.7 mm		V-1	
2.0 mm	•	V-0	
	•	5VB	
3.0 mm	•	V-0	
	•	5VA	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	3.0 to 4.0	hr
Rear Temperature	170 to 190	°C
Middle Temperature	180 to 200	°C
Front Temperature	190 to 210	°C
Nozzle Temperature	200 to 230	°C
Processing (Melt) Temp	200 to 230	°C
Mold Temperature	40 to 60	°C
Back Pressure	0.490 to 0.981	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 1.0 mm/min

³ 50 mm/min

⁴ 15 mm/min

⁵ Rate A (50°C/h), Loading 2 (50 N)

