

LG ABS AF365B

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Wednesday, September 3, 2025

General Information

Product Description

Description

AF365B is a Flame Retardant ABS product for injection molding, designed to have a flammability rating of V-0 at 2.0mm.

Key Features

Flame Retardancy

Application

Electrical/Electronic Products, IT/OA Devices, TV, Monitor Housing

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	
	• Europe	• North America	
Features	• Flame Retardant		
Uses	• Electrical/Electronic Applications • Housings • Television Housings		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E67171		
Processing Method	• Injection Molding		

Properties

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ¹	1.16	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	50	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 Strength ²			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	39.0	MPa	
Tensile Elongation ²			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	> 5.0	%	
Break, 23°C, 3.20 mm, Injection Molded	> 15	%	
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
23°C, 3.20 mm, Injection Molded	290	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)	100		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ³			ASTM D648
1.8 MPa, Unannealed, 6.40 mm, Injection Molded	84.0	°C	

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Thermal	Nominal Value	Unit	Test Method
RTI Elec			UL 746B
1.0 mm	60.0	°C	
1.7 mm	60.0	°C	
1.8 mm	85.0	°C	
2.0 mm	85.0	°C	
2.5 mm	85.0	°C	
3.0 mm	85.0	°C	
RTI Imp			UL 746B
1.0 mm	60.0	°C	
1.7 mm	60.0	°C	
1.8 mm	85.0	°C	
2.0 mm	85.0	°C	
2.5 mm	85.0	°C	
3.0 mm	85.0	°C	
RTI Str			UL 746B
1.0 mm	60.0	°C	
1.7 mm	60.0	°C	
1.8 mm	80.0	°C	
2.0 mm	80.0	°C	
2.5 mm	80.0	°C	
3.0 mm	80.0	°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Comparative Tracking Index (CTI)	PLC 2		UL 746A
High Amp Arc Ignition (HAI)			UL 746A
1.7 mm	PLC 2		
1.8 mm	PLC 2		
2.0 mm	PLC 2		
2.5 mm	PLC 2		
3.0 mm	PLC 1		
High Voltage Arc Tracking Rate (HVTR)	PLC 2		UL 746A
Hot-wire Ignition (HWI)			UL 746A
1.7 mm	PLC 3		
1.8 mm	PLC 3		
2.0 mm	PLC 2		
2.5 mm	PLC 2		
3.0 mm	PLC 2		

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Flammability		Nominal Value	Unit	Test Method
Flame Rating				
1.0 mm, ALL		HB		UL 94
1.7 mm, ALL		V-1		UL 94 IEC 60695-11-10, -20
1.8 mm, ALL		V-1		UL 94 IEC 60695-11-10, -20
2.0 mm, ALL	•	V-0		UL 94
	•	5VA		IEC 60695-11-10, -20
2.5 mm, ALL	•	V-0		UL 94
	•	5VA		IEC 60695-11-10, -20
3.0 mm, ALL	•	V-0		UL 94
	•	5VA		IEC 60695-11-10, -20
1.0 mm, ALL		HB75		IEC 60695-11-10, -20
Glow Wire Flammability Index (3.0 mm)		960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (3.0 mm)		675	°C	IEC 60695-2-13

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	200 to 230	°C
Mold Temperature	40 to 60	°C
Screw Speed	30 to 60	rpm

Notes

- ¹ 23°C
- ² 50 mm/min
- ³ Edgewise