

LG ABS AF366A

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Sunday, September 7, 2025

General Information

Product Description

Description

AF366A is a Flame Retardant ABS product for injection molding, designed to have a flammability rating of V-0 at 1.5mm.

Key Features

High 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 Parts 	Housings	
	 Electrical/Electronic Application 	pplications • Television Housings	
RoHS Compliance	RoHS Compliant		
UL File Number	• E67171		
Processing Method	Injection Molding		

Properties Properties Properties			
Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ¹	1.16	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	45	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	40.0	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	310	J/m	
23°C, 6.40 mm, Injection Molded	200	J/m	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	98		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	



LG ABS AF366A

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Thermal	Nominal Value	Unit	Test Method
RTI Elec			UL 746B
1.0 mm	60.0	°C	
1.5 mm	90.0	°C	
1.8 mm	90.0	°C	
2.0 mm	90.0	°C	
2.5 mm	90.0	°C	
3.0 mm	90.0	°C	
RTI Imp			UL 746B
1.0 mm	60.0	°C	
1.5 mm	90.0	°C	
1.8 mm	90.0	°C	
2.0 mm	90.0	°C	
2.5 mm	90.0	°C	
3.0 mm	90.0	°C	
RTI Str			UL 746B
1.0 mm	60.0	°C	
1.5 mm	90.0	°C	
1.8 mm	90.0	°C	
2.0 mm	90.0	°C	
2.5 mm	90.0	°C	
3.0 mm	90.0	°C	
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (CTI)	PLC 2		UL 746A
High Amp Arc Ignition (HAI)			UL 746A
1.5 mm	PLC 0		
1.8 mm	PLC 0		
2.0 mm	PLC 0		
2.5 mm	PLC 0		
3.0 mm	PLC 0		
High Voltage Arc Tracking Rate (HVTR)	PLC 3		UL 746A
Hot-wire Ignition (HWI)			UL 746A
1.5 mm	PLC 3		
1.8 mm	PLC 3		
2.0 mm	PLC 2		
2.5 mm	PLC 2		

LG ABS AF366A

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Flammability		Nominal Value Unit	Test Method
Flame Rating			
1.0 mm, ALL		НВ	UL 94
1.5 mm, ALL		V-0	UL 94 IEC 60695-11-10, -20
1.8 mm, ALL		V-0	UL 94 IEC 60695-11-10, -20
2.0 mm, ALL	•	V-0	UL 94
2.0 mm, ALL	•	5VA	IEC 60695-11-10, -20
25 411	•	V-0	UL 94
2.5 mm, ALL	•	5VA	IEC 60695-11-10, -20
0.0 411	•	V-0	UL 94
3.0 mm, ALL	•	5VA	IEC 60695-11-10, -20
1.0 mm, ALL		HB75	IEC 60695-11-10, -20

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