

LG ABS AF366A

Acrylonitrile Butadiene Styrene

LG Chem Ltd.

PROSPECTOR®

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Technical Data

Product Description

Flame Retardant

Application

Electric parts, IT/OA device

TV, monitor housing

General

Material Status • Commercial: Active

UL Yellow Card ¹ • E67171-101675454

Search for UL Yellow Card • LG Chem Ltd.
• LG ABS

Availability • Asia Pacific • Latin America
• Europe • North America

Features • Flame Retardant

Uses • Electrical Parts • Housings • Television Housings

RoHS Compliance • RoHS Compliant

Processing Method • Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.16	1.16 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	54 g/10 min	54 g/10 min	ASTM D1238
Molding Shrinkage - Flow			ASTM D955
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ³			ASTM D638
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	299000 psi	2060 MPa	
Tensile Strength ⁴			ASTM D638
Yield, 73°F (23°C), 0.126 in (3.20 mm), Injection Molded	5830 psi	40.2 MPa	
Tensile Elongation ⁴			ASTM D638
Yield, 73°F (23°C), 0.126 in (3.20 mm), Injection Molded	5.0 %	5.0 %	
Break, 73°F (23°C), 0.126 in (3.20 mm), Injection Molded	> 15 %	> 15 %	
Flexural Modulus ⁵			ASTM D790
73°F (23°C), 0.252 in (6.40 mm), Injection Molded	320000 psi	2210 MPa	
Flexural Strength ⁵			ASTM D790
73°F (23°C), 0.252 in (6.40 mm), Injection Molded	9250 psi	63.7 MPa	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	5.7 ft·lb/in	300 J/m	
73°F (23°C), 0.252 in (6.40 mm), Injection Molded	3.7 ft·lb/in	200 J/m	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness			ASTM D785
R-Scale, 73°F (23°C), Injection Molded	100	100	



Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.252 in (6.40 mm), Injection Molded	183 °F	84.0 °C	
RTI Elec (0.07 to 0.12 in (1.8 to 3.0 mm))	185 °F	85.0 °C	UL 746B
RTI Imp (0.07 to 0.12 in (1.8 to 3.0 mm))	185 °F	85.0 °C	UL 746B
RTI Str (0.07 to 0.12 in (1.8 to 3.0 mm))	176 °F	80.0 °C	UL 746B

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm)	V-0	V-0	
0.08 in (2.0 mm)	• V-0 • 5VA	• V-0 • 5VA	
0.10 in (2.5 mm)	• V-0 • 5VA	• V-0 • 5VA	
0.12 in (3.0 mm)	• V-0 • 5VA	• V-0 • 5VA	

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 194 °F	80 to 90 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Rear Temperature	338 to 374 °F	170 to 190 °C
Middle Temperature	356 to 392 °F	180 to 200 °C
Front Temperature	374 to 410 °F	190 to 210 °C
Nozzle Temperature	392 to 446 °F	200 to 230 °C
Processing (Melt) Temp	392 to 446 °F	200 to 230 °C
Mold Temperature	104 to 140 °F	40 to 60 °C
Back Pressure	71.1 to 142 psi	0.490 to 0.981 MPa
Screw Speed	30 to 60 rpm	30 to 60 rpm

Injection Notes

Minimum Moisture Content: 0.01%

Notes

¹ A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

² Typical properties: these are not to be construed as specifications.

³ 0.039 in/min (1.0 mm/min)

⁴ 2.0 in/min (50 mm/min)

⁵ 0.59 in/min (15 mm/min)



Where to Buy

Supplier

LG Chem Ltd.

Englewood Cliffs, Englewood Cliffs USA
Telephone: 201-816-2302
Web: <http://www.chemwide.com/>

Distributor

CCC Plastics

Telephone: 800-461-1638
Web: <https://www.ccc-group.com/>
Availability: Canada

Channel Prime Alliance

Telephone: 800-247-8038
Web: <http://www.channelpa.com/>
Availability: North America

Chase Plastic Services, Inc.

Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here: <http://www.chaseplastics.com/contact/locations>
Telephone: 800-232-4273
Web: <http://www.chaseplastics.com/>
Availability: North America

Distrupol Ltd

Distrupol Ltd is a Pan European distribution company. Contact Distrupol Ltd for availability of individual products by country.
Telephone: 08452003040
Web: <http://www.distrupol.com/>
Availability: Belgium, Denmark, Finland, Luxembourg, Netherlands, Norway, Sweden

Entec Polymers Latin America

Contact Entec Polymers for availability of individual products by country.
Web: <https://www.entecpolymers.com/>
Availability: Latin America

POLYMIX

POLYMIX is a Pan European distribution company. Contact POLYMIX for availability of individual products by country.
Telephone: +33-3-8920-1380
Web: <http://www.polymix.eu/>
Availability: Belgium, Croatia, France, Luxembourg, Netherlands, Romania, Serbia, Slovenia, Spain, Tunisia

Resin Resource, Inc.

Telephone: 877-652-3431
Web: <http://www.resinresourceinc.com/>
Availability: North America

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.
Telephone: +32-14-672511
Web: <http://www.resinex.com/>
Availability: Europe

SNETOR

SNETOR is a Pan European distribution company. Contact SNETOR for availability of individual products by country.
Telephone: +33-1-4904-8888
Web: <http://www.snetor.com/>
Availability: France