

LG Chemical® AF312B

Feature: Injection Molding, Flame Retardant

Application: Electric/Electronic Applications (TV, Monitor Housing) IT/OA device

CAS No. 9003-56-9, 79-94-7 and 1309-64-4

Physical Properties	Metric	English	Comments
Specific Gravity	1.18 g/cc	1.18 g/cc	ASTM D792
Maximum Moisture Content	0.010	0.010	Injection Molding
Linear Mold Shrinkage, Flow	0.0040 - 0.0070 cm/cm @Thickness 3.20 mm	0.0040 - 0.0070 in/in @Thickness 0.126 in	ASTM D955

Melt Flow	53 g/10 min @Load 10.0 kg, Temperature 220 °C	53 g/10 min @Load 22.0 lb, Temperature 428 °F	ASTM D1238
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Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	104	104	ASTM D785

Tensile Strength, Yield	42.2 MPa @Thickness 3.20 mm	6120 psi @Thickness 0.126 in	50 mm/min; ASTM D638
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Elongation at Break	20 % @Thickness 3.20 mm	20 % @Thickness 0.126 in	50 mm/min; ASTM D638
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Elongation at Yield	>= 5.0 % @Thickness 3.20 mm	>= 5.0 % @Thickness 0.126 in	50 mm/min; ASTM D638
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Tensile Modulus	2.16 GPa @Thickness 3.20 mm	313 ksi @Thickness 0.126 in	1 mm/min; ASTM D638
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Flexural Yield Strength	69.6 MPa @Thickness 6.40 mm	10100 psi @Thickness 0.252 in	15 mm/min; ASTM D790
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Flexural Modulus	2.55 GPa @Thickness 6.40 mm	370 ksi @Thickness 0.252 in	15 mm/min; ASTM D790
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Izod Impact, Notched	2.45 J/cm @Thickness 6.40 mm, Temperature 23.0 °C	4.59 ft-lb/in @Thickness 0.252 in, Temperature 73.4 °F	ASTM D256
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	2.84 J/cm @Thickness 3.20 mm, Temperature 23.0 °C	5.33 ft-lb/in @Thickness 0.126 in, Temperature 73.4 °F	ASTM D256
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Izod Impact, Unnotched	0.785 J/cm @Thickness 6.40 mm, Temperature -30.0 °C	1.47 ft-lb/in @Thickness 0.252 in, Temperature -22.0 °F	ASTM D256
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	0.785 J/cm @Thickness 3.20 mm, Temperature -30.0 °C	1.47 ft-lb/in @Thickness 0.126 in, Temperature -22.0 °F	ASTM D256
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Electrical Properties	Metric	English	Comments
Arc Resistance	0.00 - 60 sec	0.00 - 60 sec	ASTM D495

Comparative Tracking Index	400 - 600 V	400 - 600 V	
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Hot Wire Ignition, HWI	30 - 60 sec @Thickness >=2.10 mm	30 - 60 sec @Thickness >=0.0827 in	
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High Amp Arc Ignition, HAI	30 - 60 arcs @Thickness 2.10 mm	30 - 60 arcs @Thickness 0.0827 in	
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High Voltage Arc-Tracking Rate, HVTR	0.000 - 10.0 mm/min	0.000 - 0.394 in/min	
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