

LG Chemical® AF312C

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
Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	103	103	ASTM D785
Tensile Strength, Yield	42.2 MPa @Thickness 3.20 mm	6120 psi @Thickness 0.126 in	50 mm/min; ASTM D638
Elongation at Break	20 % @Thickness 3.20 mm	20 % @Thickness 0.126 in	50 mm/min; ASTM D638
Elongation at Yield	>= 5.0 % @Thickness 3.20 mm	>= 5.0 % @Thickness 0.126 in	50 mm/min; ASTM D638
Tensile Modulus	2.16 GPa @Thickness 3.20 mm	313 ksi @Thickness 0.126 in	1 mm/min; ASTM D638
Flexural Yield Strength	70.6 MPa @Thickness 6.40 mm	10200 psi @Thickness 0.252 in	15 mm/min; ASTM D790
Flexural Modulus	2.55 GPa @Thickness 6.40 mm	370 ksi @Thickness 0.252 in	15 mm/min; ASTM D790
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
	2.45 J/cm @Thickness 3.20 mm, Temperature 23.0 °C	4.59 ft-lb/in @Thickness 0.126 in, Temperature 73.4 °F	ASTM D256
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
	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