

LG Chemical® XR401

Feature: Injection Molding, Heat Resistance

Application: Electric & Electronic Housing (Frame etc) Automotives Interior & Exterior Housing (lamp housing etc)

CAS No. 25120-20-1, 9003-56-9, 25747-74-7 and 9003-54-7

Physical Properties	Metric	English	Comments
Specific Gravity	1.05 g/cc	1.05 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	
Melt Flow	9.0 g/10 min @Load 10.0 kg, Temperature 220 °C	9.0 g/10 min @Load 22.0 lb, Temperature 428 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	108	108	ASTM D785
Tensile Strength, Yield	49.0 MPa @Thickness 3.20 mm	7110 psi @Thickness 0.126 in	50 mm/min; ASTM D638
Elongation at Break	25 % @Thickness 3.20 mm	25 % @Thickness 0.126 in	50 mm/min; ASTM D638
Flexural Yield Strength	78.5 MPa @Thickness 3.20 mm	11400 psi @Thickness 0.126 in	15 mm/min; ASTM D790
Flexural Modulus	2.55 GPa @Thickness 3.20 mm	370 ksi @Thickness 0.126 in	15 mm/min; ASTM D790
Izod Impact, Notched	2.16 J/cm @Thickness 6.40 mm, Temperature 23.0 °C	4.04 ft-lb/in @Thickness 0.252 in, Temperature 73.4 °F	ASTM D256
	2.26 J/cm @Thickness 3.20 mm, Temperature 23.0 °C	4.22 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
	0.883 J/cm @Thickness 3.20 mm, Temperature -30.0 °C	1.65 ft-lb/in @Thickness 0.126 in, Temperature -22.0 °F	ASTM D256

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	ASTM D257
Dielectric Strength	33.0 kV/mm @Thickness 1.00 mm	838 kV/in @Thickness 0.0394 in	ASTM D149
Arc Resistance	60 - 120 sec	60 - 120 sec	ASTM D495
Comparative Tracking Index	>= 600 V	>= 600 V	Solution A; IEC 60112
Hot Wire Ignition, HWI	7.0 - 15 sec @Thickness >=1.50 mm	7.0 - 15 sec @Thickness >=0.0591 in	
	15 - 30 sec @Thickness >=3.00 mm	15 - 30 sec @Thickness >=0.118 in	
High Amp Arc Ignition, HAI	>= 120 arcs @Thickness 1.50 mm	>= 120 arcs @Thickness 0.0591 in	
	>= 120 arcs @Thickness 3.00 mm	>= 120 arcs @Thickness 0.118 in	
High Voltage Arc-Tracking Rate, HVTR	25.4 - 50.0 mm/min	1.00 - 1.97 in/min	