

LG Chemical® TR557

Feature: Injection Molding, High Transparency, High Impact
Application: Electric/Electronic Applications, Copier, Printer etc.

CAS No. 9011-14-7 and 9003-56-9

Information provided by LG Chemical

Physical Properties	Metric	English	Comments
Specific Gravity	1.09 g/cc	1.09 g/cc	ASTM D792

Melt Flow	23 g/10 min @Load 10.0 kg, Temperature 220 °C	23 g/10 min @Load 22.0 lb, Temperature 428 °F	ASTM D1238
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Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	109	109	ASTM D785

Tensile Strength, Yield	45.1 MPa @Thickness 3.20 mm	6540 psi @Thickness 0.126 in	50 mm/min; ASTM D638
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Elongation at Break	30 % @Thickness 3.20 mm	30 % @Thickness 0.126 in	50 mm/min; ASTM D638
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Flexural Yield Strength	72.6 MPa @Thickness 6.40 mm	10500 psi @Thickness 0.252 in	15 mm/min; ASTM D790
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Flexural Modulus	2.22 GPa @Thickness 6.40 mm	321 ksi @Thickness 0.252 in	15 mm/min; ASTM D790
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Izod Impact, Notched	1.57 J/cm @Thickness 3.20 mm, Temperature 23.0 °C	2.94 ft-lb/in @Thickness 0.126 in, Temperature 73.4 °F	ASTM D256
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	1.67 J/cm @Thickness 6.40 mm, Temperature 23.0 °C	3.12 ft-lb/in @Thickness 0.252 in, Temperature 73.4 °F	ASTM D256
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Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	

Dielectric Strength	7.00 kV/mm	178 kV/in	
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Hot Wire Ignition, HWI	7.0 - 15 sec @Thickness >=1.50 mm	7.0 - 15 sec @Thickness >=0.0591 in	
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	7.0 - 15 sec @Thickness >=3.00 mm	7.0 - 15 sec @Thickness >=0.118 in	
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High Amp Arc Ignition, HAI	>= 120 arcs @Thickness 1.50 mm	>= 120 arcs @Thickness 0.0591 in	
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	>= 120 arcs @Thickness 3.00 mm	>= 120 arcs @Thickness 0.118 in	
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Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	81.0 °C @Thickness >=1.50 mm	178 °F @Thickness >=0.0591 in	Unannealed; ASTM D648
UL RTI, Electrical	50.0 °C @Thickness >=1.50 mm	122 °F @Thickness >=0.0591 in	
	50.0 °C @Thickness >=3.00 mm	122 °F @Thickness >=0.118 in	
UL RTI, Mechanical with Impact	50.0 °C @Thickness >=1.50 mm	122 °F @Thickness >=0.0591 in	
	50.0 °C @Thickness >=3.00 mm	122 °F @Thickness >=0.118 in	
UL RTI, Mechanical without Impact	50.0 °C @Thickness >=1.50 mm	122 °F @Thickness >=0.0591 in	
	50.0 °C @Thickness >=3.00 mm	122 °F @Thickness >=0.118 in	
Flammability, UL94	HB @Thickness >=1.50 mm	HB @Thickness >=0.0591 in	
	HB @Thickness >=3.00 mm	HB @Thickness >=0.118 in	
Optical Properties	Metric	English	Comments
Haze	2.0 %	2.0 %	ASTM D1003
Transmission, Visible	90 %	90 %	ASTM D1003