

Lexan® 3412R Resin

PROPERTY	NOMINAL VALUES	TEST METHOD
Physical		
Specific Gravity	1.35	ASTM D792
Density	1.356 g/cm ³	ASTM D792
Water Absorption, 24 hours	0.16 %	ASTM D570
Water Absorption, equilibrium, 23°C	0.29 %	ASTM D570
Electrical		
Volume Resistivity	>1.E+17 Ohm-cm	ASTM D257
Dielectric Strength, in air, 3.2 mm	19.2 kV/mm	ASTM D149
Relative Permittivity, 50/60 Hz	3.17	ASTM D150
Relative Permittivity, 1 MHz	3.13	ASTM D150
Comparative Tracking Index (UL)	5 PLC Code	UL 746A
Impact		
Izod Impact, unnotched, 23°C	1014 J/m	ASTM D4812
Izod Impact, notched, 23°C	106 J/m	ASTM D256
Tensile Impact, Type "S"	63 kJ/m ²	ASTM D1822
Falling Dart Impact, 23°C	5 J	ASTM D3029
Mechanical		
Tensile Stress, break (Type I, 5 mm/min)	110 MPa	ASTM D638
Tensile Strain, break (Type I, 5 mm/min)	5 %	ASTM D638
Flexural Stress, yield (1.3 mm/min, 50 mm span)	131 MPa	ASTM D790
Flexural Modulus (1.3 mm/min, 50 mm span)	5510 MPa	ASTM D790
Hardness, Rockwell M	91	ASTM D785
Hardness, Rockwell R	122	ASTM D785
Thermal		
Vicat Softening Temp. Rate B/50	165 °C	ASTM D1525
Thermal Conductivity	0.21 W/m-°C	ASTM C177
Relative Temp Index, Elec	130 °C	UL 746B
Relative Temp Index, Mech w/impact	130 °C	UL 746B
Relative Temp Index, Mech w/o impact	130 °C	UL 746B
Flame Characteristics		
UL Recognized, 94V-1 Flame Class Rating	1.47 mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	2.99 mm	UL 94
UL Recognized, 94-5VA Rating	2.99 mm	UL 94

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**Flame characteristics not intended to reflect hazards under actual fire conditions.

***Typical values only. Actual properties of individual batches will vary within specification limits.