



# PROFESSIONAL PLASTICS

TYPICAL PROPERTIES of REXOLITE®			
ASTM or UL test	Property	Rexolite® 1422 unfilled	Rexolite® 2300 glass-filled
<b>PHYSICAL</b>			
D792	Density (lb/in <sup>3</sup> ) (g/cm <sup>3</sup> )	0.038 1.05	0.042 1.11
D570	Water Absorption, 24 hrs (%)	0.0008	0.10
<b>MECHANICAL</b>			
D638	Tensile Strength (psi)	9,000	9,500
D638	Flexural Strength (psi)	11,500	10,500
D256	IZOD Notched Impact (ft-lb/in)	0.3	0.75
<b>THERMAL</b>			
D696	Coefficient of Linear Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	3.8	3.2
D648	Recommended Operating Temperature Range (°F) (°C)	-76 to +212 -60 to +100	-103 to +212 -75 to +100
C177	Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F) (x 10 <sup>-4</sup> cal/cm-sec-°C)	1.01 3.5	1.45 5.0
<b>ELECTRICAL</b>			
D149	Dielectric Strength (V/mil) short time, 1/8" thick	500	500
D150	Dielectric Constant (1 MHz to 500 GHz)	2.53	2.62
D150	Dissipation Factor		
	at 1 MHz	0.00012	0.0004
	at 10 MHz	0.00025	0.0005
	at 10 GHz	0.00066	0.0014
D257	Surface Resistivity (ohm-cm) at 50% RH	>10 <sup>14</sup>	5 x 10 <sup>12</sup>
D257	Volume Resistivity (ohm-cm) at 50% RH	>10 <sup>16</sup>	5 x 10 <sup>13</sup>
<b>OPTICAL AND ACOUSTIC</b>			
-	Acoustic Impedance	2.5	-
-	Velocity of Sound (in/sec)	93,000	-
-	Optical Transmittance, Visible Light	87%	-
-	Refractive Index		
	@ 589 nM	1.59	-
	@ 486 nM	1.604	-
	@ 656 nM	1.585	-
-	Velocity of Sound (in/sec)	93,000	-

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. - All values at 73°F (23°C) unless otherwise noted.

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