



REXOLITE®

Characteristics

- * Chemically Resistant
- * Stable Electrical Properties, Giga-Hertz Range
- * Resists Water Absorption
- * Dimensionally Stable
- * Excellent Sound Transmission Characteristics

Description

Rexolite is a thermoset, rigid and translucent plastic produced by cross linking polystyrene with divinylbenzene. The material is known for its unusually stable electrical properties into the Giga-hertz range. It is dimensionally stable and has excellent sound transmission attributes. **Rexolite 1422** is an unfilled version that is chemically resistant, light weight, and produces minimum outgassing. **Rexolite 2200** is glass filled which produces greater dimensional stability and rigidity without the sacrifice of key physical characteristics.

Forms Available

ROD .250 to 2.000 " diameter, Lengths to 8'
 PLATE .250" to 1.500" thick, Widths to 24", Lengths to 48"
 COLOR Clear

Typical Property Values

MECHANICAL @ 73°F

Specific Gravity	
Tensile Strength	psi
Tensile Modulus of Elasticity	psi
Tensile Elongation (at Break)	%
Flexural Strength	psi
Flexural Modulus of Elasticity	psi
Shear Strength	psi
Compressive Strength, 10% Deformation	psi
Compressive Modulus of Elasticity	psi
Rockwell Hardness	M Scale
Izod Impact Strength, Notched	ft-lbs/in. of notch
Coefficient of Friction, Dynamic (Dry vs. Steel)	
Limiting PV (4 :1 Safety Factor Applied)	ft.lbs/in. ² min
Wear Factor	in ³ -min/ft.lbs. hr.
Water Absorption 24 hrs	% by wt.

THERMAL

Coefficient of Linear Expansion (-40°F to 300°F)	in./in./°F
Heat Deflection Temperature @264 psi	°F
Melting Point (Crystalline)	°F
Continuous Service Temperature in Air	°F
Thermal Conductivity	°F

ELECTRICAL

Dielectric Strength, Short Term	Volts/mil
Surface Resistivity	Ohms/Sq.
Dielectric Constant	1 MHz
Dissipation Factor	1 MHz

Rexolite® 1422

1.05
9,000
11,500
0.30
0.00
3.8 x 10 ⁻⁵
500
2.53
0.00012

Rexolite® 2200-GF

1.11
9,500
10,500
0.75
0.10
3.2 x 10 ⁻⁵
500
2.62
0.0004

(Properties listed above are provided for reference only, they should not be used for design specifications or quality control , Rexolite is a registered Trademark of C-Lec Plastics Co.)