

Material Data Sheet
REXOLITE® 1422

Chemical Designation: Cross Linked Polystyrene
Abbreviation PS
Colours, Fillers Clear

	Unit	ASTM Standard
Physical		
Density	1.05 g/cm ³	D792
Water Absorption	0.08 %	D570
Tensile Strength	62 MPa	D638
Thermal		
Coefficient of Thermal Expansion	7.0 10 ⁻⁵ k	D3386
Recommended operation temperature range	-60 to 100 °C	
Thermal conductivity	1.23 Btu.in/hr.ft ² .F	E1530
Electrical		
Dielectric strength short time 0.25mm thick	2100 V/mm	D149
Dielectric Constant	2.53 (1KHz to 500 GHz)	D1531
Dissipation Factor	0.0002 at 1 MHz	D1531
	0.0002 at 30 MHz	D1531
	0.0001 at 10 GHz	IPC-TM-650
Surface resistivity at 50% RH	>10 ¹⁴ Ω	IPC-TM-650
Volume resistivity at 50% RH	>10 ¹⁶ Ω / cm	IPC-TM-650
Optical & Acoustic		
Acoustic impedance	2.5	
Velocity of sound	93,000 in/sec	
Optical transmittance, Visible Light (1" thick)	87%	
Refractive Index	1.589 at 589 nm	
	1.599 at 508 nm	
	1.614 at 436 nm	

The above information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of chemical resistance, of certain properties and the suitability of our products and their applications. Our products are not destined for use in medical and dental implants. Existing commercial patents must be observed. Unless otherwise stated, these values represent averages taken from injection moulding samples, dry as moulded. We reserve the right to make technical alterations.