

## Redco<sup>™</sup> POLYETHERIMIDE (PEI)

	TEST METHOD		VALUE	
PROPERTY	ISO	ASTM	SI	ENGLISH
PHYSICAL	1			
SPECIFIC GRAVITY	1183	D792	0.3-1.5	1.3-1.5
WATER ABSORPTION, 24h, 1/8-in thk (%)			0.18-0.30	0.18-0.30
		I		
MECHANICAL				
TENSILE STRENGTH	527	D638	113-117 Mpa	16.5-17 kpsi
ELONGATION AT BREAK (%)	527	D638	2-80	2-80
TENSILE MODULUS	527	D638	3.3-5.9 GPa	0.48-0.85 Mpsi
FLEXURAL MODULUS	-	D790	3.4-6.2 GPa	0.50-0.90 Mpsi
COMPRESSIVE MODULUS	604	D695	3.3-4.1 GPa	0.48-0.60 Mpsi
NOTCHED IZOD IMPACT	180/1A	D256	27-54 J/m	0.5-1.0 ft-lb/in2
HARDNESS, ROCKWELL	2039-2	D785	M112-M115	M112-M115, R125, D86
COEFFICIENT OF FRICTION DYNAMIC	-	-	0.18-0.42	0.18-0.42
FLEXURAL STRENGTH		D790	138 Mpa	20,000 PSI
COMPRESSIVE STRENGTH	604	D695	152 Mpa	22,000 PSI
COMPRESSIVE MODULUS		D695	3.31 Gpa	480 ksi
THERMAL				
COEFFICIENT OF LINEAR THERMAL EXPANSION x 10-5	-	E831 (TMA)	2.0-5.6 mm/mm-ºC	1.1-3.1 in/in-ºF
HEAT DEFLECTION TEMPERATURE	75	D648		
AT 1.8 Mpa (264 psi)	-	D3418	199-210ºC	390-410ºF
GLASS TRANSITION TEMPERATURE	-	-	215ºC	419ºF
CONTINUOUS SERVICE TEMPERATURE IN AIR	-	UL 94	170ºC	338ºF
FLAMMAILITY	IEC 243	D149		
AT 3.1mm (0.125") ESTIMATED	IEC 93	D257	V-0	V-0
DIELECTRIC STRENGTH	IEC 250	D150	conductive - 33 kV/mm	conductive - 830 V/mil
VOLUME RESISTANCY	IEC 250	D150	10 <sup>4</sup> - 7 x 10 <sup>17</sup> ohm-cm	10 <sup>4</sup> - 2 x 10 <sup>18</sup> ohm-in
DIELECTRIC CONSTANT	62	D570		
AT 1 MHz			conductive - 5.15	conductive - 3.15
DISSIPATION FACTOR				
AT 1 MHz			conductive - 0.0013	conductive - 0.0013
THERMAL CONDUCTIVITY		F433	0.122 w/m-k	0.85 BTU-in/hr.ft-°F

We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, whether alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products. For most recent technical information, phone in USA or in Canada.