ECF COMPOSITES LTD

INTERNATIONAL ACCREDITED COMPANY 0046 UKAS MANAGEMENT SYSTEMS BS EN ISO 9001 : 2008

Typical Mechanical & Electrical Properties of GRP Rods & Tubes (Upto 31.8mm)

Unidirectional E Glass rovings

Flexural Strength	650MN/m^2
Flexural Modulus	30GN/m^2
Tensile Strength	500MN/m^2
Tensile Modulus	27GN/m^2
Density	1.8gm/cc
Water Absorption	0.5% – 2%
Compressive Strength	190MN/m^2
Coefficient of Thermal Expansion	7.2 x 10^{-6}/K
Barcol Hardness	40-70
Heat Distortion Temp	125-145^{o}C
Electrical Surface Resistivety	10^{12} OHMS (Between 10^{10} - 10^{15})
Volume Resistivety	10^{15} OHMS
Insulation Resistance	M Ohm 1000
Dielectric Strength @ 90^0	Kv/mm 25
Dielectric Strength @ 90^0	KV 75
Permittivity @ 50 Hz	5
Dissipation Factor	0.02
Comparative Tracking	V 600
Arc Resistance	s 300

Accuracy

Small Rod Tolerance up to 6mm

Polyester +0.05/-0.07 Vinyl Ester +0.05/-0.15

Calorific content of 811 resin	28mj/kg
30% glass	19 mj/kg
55%-60% glass	10-15mj/kg