

Datasheet**RS PRO Polyester Glass GPO3**

Stock No: 2035178

**Technical Specifications:**

Colour	Red
IEC Grade	UPGM203
Electrical Strength (in air)	18 kV/mm
Electrical Strength (in oil)	23 kV/mm
Sheet Size	420 x 297mm

Features & Benefits:

- **Excellent electrical insulation**
- **Good temperature range (up to 160°C)**
- **Excellent mechanical properties**
- **Flame retardant and UL rated**

Properties	Method	SI Units	Result
Tensile Strength	ASTM D 638	N/mm ²	54
Tensile Modulus	ASTM D638	N/mm ²	11,720
Flexural Strength	ASTM D 790	N/mm ²	152
Flexural Strength @ 130°C	ASTM D 790	N/mm ²	90
Compressive Strength	ASTM D 695	N/mm ²	228
Shear Strength	ASTM D 732	N/mm ²	80
IZO D Impact Strength (notched)	ASTM D 256	J/cm	4.8
Electrical Strength/Perpendicular S/T in air	ASTM D 149	kV/mm	18
Electrical Strength/Perpendicular S/T in oil	ASTM D 149	kV/mm	23
Electrical Strength/Parallel S/S in oil	ASTM D 149	kV	47
Arc Resistance	ASTM D495	Seconds	180
Inclined Plane Track Resistance – 3.2mm	ASTM D2303	Minutes	1,000
IEC Track Resistance (CTI)	UL 746A	V	500

Properties	Method	SI Units	Result
UL High Voltage Track Rate	UL 746A	-	0
Permittivity, 60 Hz	ASTM D 150	-	4.1
Permittivity, 1 MHz	ASTM D150	-	4.1
Dissipation Factor, 60 Hz	ASTM D 150	-	0.013
Dissipation Factor, 1 MHz	ASTM D 150	-	0.010
Insulation Resistance	ASTM D 257	Ohm x 10 ¹²	3.1
Behaviour in Fire	UL 94	-	V-0
Oxygen Index	ASTM D 2863	%O ₂	35
Flame Resistance Ignition Time Burn Time	ASTM D 2229-II	Seconds	85 49
Water Absorption	ASTM D 570	% by wt	0.4
Specific Gravity	ASTM D 792	-	1.81
Coefficient of Thermal Expansion	ASTM D696	10 ⁻⁶ /K	2
Thermal Conductivity	ASTM C 177	W/m.k	0.27
UL Temperature Index, electrical/mechanical	UL 746 B/ UL 746 B	-	130/160
UL Recognition File Number	-	-	E81928