

Datasheet**RS PRO Polyester Glass GPO3**

Stock No: 2035176

**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 |