

TUFNOL Grade 2F/14

Cotton fabric laminate

Medium weave cotton/phenolic resin laminated plastic

(SRBF - Synthetic resin Bonded Fabric)

For electromechanical applications.

TUFNOL Grade 2F/14 is a cotton fabric laminate with enhanced electrical properties, specially developed to meet the requirements of the relevant British Standard specification.

What is Grade 2F/14 used for?

It is used for electro-mechanical applications where the benefits of mechanical toughness and wear resistance are combined with a need for good insulation resistance. Typical uses include slot wedges, stator packings, coil formers and operating arms.

| TYPES AVAILABLE | Sheets | Rods | Tubes | Other sections |
|-----------------|--------|------|-------|----------------|
| Natural colour | Yes | No | No | No |

*Minimum order quantities may apply.

SPECIFICATIONS for TUFNOL Grade 2F/14**BRITISH STANDARDS****Current Standards****Recent Standards****(now obsolete)**

Sheet

BS EN 60893-3-4 Type PF CC 202

BS 2572 Types F4 & F5

PHYSICAL PROPERTIES**TUFNOL Grade 2F/14 Sheet**

| PROPERTY | TYPICAL RESULT | UNITS |
|--|----------------------|-------------------|
| Cross breaking strength | 115 | MPa |
| Impact strength, notched, Charpy | 7.0 | kJ/m ² |
| Compressive strength, flatwise | 290 | MPa |
| Compressive strength, edgewise | 215 | MPa |
| Resistance to flatwise compression | 1.4 | % |
| Shear strength, flatwise | 80 | MPa |
| Water Absorption | | |
| - 1.6mm thk. | 50 | mg |
| - 3mm thk. | 60 | mg |
| - 6mm thk. | 80 | mg |
| - 12mm thk. | 90 | mg |
| Electric strength, flatwise in oil at 90°C | | |
| - 1.6mm thk. | 9.0 | MV/m |
| - 3mm thk. | 7.5 | MV/m |
| - 6mm thk. | 6.0 | MV/m |
| Electric strength, edgewise in oil at 90°C | 35 | kV |
| Insulation resistance after immersion in water | in5x10 ¹⁰ | ohms |

| | | |
|-------------------------------|---------|----|
| Loss tangent at 1 MHz | 0.047 | - |
| Permittivity at 1 MHz | 4.8 | - |
| Relative density | 1.33 | - |
| Maximum working temperature** | | |
| - continuous | 120 | °C |
| - intermittent | 130 | °C |
| Thermal classification | Class E | - |

Test methods as BS EN 60893-2, where applicable.

**Users of highly stressed components at temperatures approaching the maximum are recommended to seek further advice from TUFNOL Ltd.