

4. Aperçu des propriétés détaillées

4.2. Epratex phénol : Résine phénolique renforcée de tissu utilisable jusqu'à 120°C

Propriétés

| Test Method | Norm | | Tubes and rods | | | | |
|---|------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------|
| | (D) DIN 7735 | Hgw 2082 | Hgw 2082.5 | Hgw 2083 | Hgw 2085 | Hgw 2088 | |
| | EN 60893/IEC 893 | PF CC 201 | PF CC 202 | PF CC 203 | PF CC 22 | PF CC 42 | |
| | (GB) BS | 2572-F3 | 2572-F4 | 2572-F2 | (EN 61212) | (EN 61212) | |
| | (USA) NEMA L1 | C | CE | L | | | |
| | (F) NF C26 | 150 C | 150 C | 150 CC | | | |
| | (CH) VSM | S-PF-CC1 | S-PF-CC2 | S-PF-CC3 | | | |
| | Resin | phenol | phenol | phenol | phenol | phenol | |
| | Reinforcement | cotton fabric med. weave | cotton fabric med. weave | cotton fabric fine weave | cotton fabric fine weave | cotton fabric fine weave | |
| Density | DIN 53479 | g/cm ³ | 1,3-1,4 | 1,3-1,4 | 1,0-1,1 | 1,2 | 1,3 |
| Flexural strength, unproces. / 23°C | DIN 53452 | MPa | 130 | 115 | 150 | 80 | 80 |
| Impact strength a _{n10} end a _{n15} | DIN 53453 | kJ/m ² | 30 | 20 | 35 | - | - |
| Notched bar impact value a _{k10} | DIN 53453 | kJ/m ² | 10 | 10 | 12 | - | - |
| Notched bar impact value a _{k15} | DIN 53453 | kJ/m ² | 15 | 15 | 15 | - | - |
| Tensile strength | DIN 53455 | MPa | 80 | 60 | 100 | 50 | 50 |
| Compressive strength | DIN 53454 | MPa | 170 | 150 | 170 | 40 | 65 |
| Split load | DIN 53463 | N | 2500 | 2500 | 2500 | - | - |
| Modulus of elasticity-bending test | DIN 53457 | MPa | 7000 | 7000 | 7000 | 6000 | 7000 |
| Resistance between plugs after 24 h storage in water/23°C | DIN 53482 | Ω | - | 10 ⁷ | - | 10 ⁸ | 10 ⁸ |
| 1 minute test voltage parallel to lamination | DIN 53481 | kV | 8 | 20 | 8 | 5 | 5 |
| 1 minute test voltage perpendicular to lamination | DIN 53481 | kV | 5 | 5 | 5 | 10 | 5 |
| Dielectric loss factor 50 Hz / 96h / 105 °C | DIN 53483 | max. | - | - | - | - | - |
| 1 MHz / 24h storage in water | DIN 53483 | max. | - | - | - | - | - |
| Dielectric constant | DIN 53483 | >> | 5 | 5 | 5 | - | - |
| Tracking resistance index | IEC 112 | CTI | 100 | 100 | 100 | 100 | 100 |
| Electrolytic corrosion | DIN 53489 | max. | - | - | - | - | - |
| Arc resistance | DIN 53484 | class. | - | - | - | - | - |
| Thermal conductivity | DIN 52612 | W/m*k | 0,2 | 0,2 | 0,2 | - | - |
| Linear expansion coefficient | VDE 0304/2 | 10 ⁻⁶ /K | 20-40 | 20-40 | 20-40 | - | - |
| Temperature index | VDE 0304/2 | °C | 110 | 110 | 110 | 120 | 120 |
| Limit value determin. of the limit based on flexural str. | - | MPa | 65 | 60 | 75 | - | - |
| Flammability | UL 94 | class | - | - | - | - | - |
| Oxygen index | ISO 4589 | % | - | - | - | - | - |
| Insulating class | IEC Publ.85 | | A | A | A | - | - |
| Glow rod test | DIN 53459 | class | 2b | 2b | 2b | - | - |
| Water absorption, 4 mm thick. | DIN 53459 | mg | 120 | 120 | 120 | - | - |
| Colour | | | brown | brown | brown | brown | brown |