

Material Data Sheet

| Trade name | PTFE+60% bronze (extruded) | | |
|--|----------------------------|--------------------|----------------------|
| DIN EN ISO 1043 designation | PTFE | | |
| Modification | Bronze | | |
| <i>Properties</i> | <i>Unit</i> | <i>Test method</i> | <i>Value</i> |
| General Properties | | | |
| Density | g/cm ³ | ASTM D 792 | 3,85 |
| Water absorption | % | ASTM D 570 | <0,01 |
| Flammability ATB | sec | ASTM D 635 | <5 |
| AEB | mm | ASTM D 635 | <5 |
| Wear factor (K) (PV=100) | (3) | | 10 |
| Mechanical Properties | | | |
| Tensile strength | MPa | ASTM D 4894 | 14 |
| Elongation at break | % | ASTM D 4894 | 100 |
| Hardness | Skala D | ASTM D 2240 | 65 |
| Deformation under load (24h, 13,7MPa, 23°C) | % | ASTM D 621 | 4 |
| Friction coefficient static | | ASTM D 3028 (1) | |
| Friction coefficient dynamic | | ASTM D 3028 (1) | 0,14 |
| Compressive strength 1% deformation | MPa | ASTM D 695 | 10 |
| Thermal Properties | | | |
| Coefficient of linear expansion from 25 to 100°C | °C ⁻¹ | ASTM D 696 | 8 x 10 ⁻⁵ |
| Thermal conductivity | W/mK | ASTM C 177 | 0,20 |
| Service temperature range | °C | | -200 / +260 |
| Electrical Properties | | | |
| Dielectric strength (in air, thickness 0,125mm) | kV/mm | ASTM D 149 | 80 |
| Dielectric constant (50-109 Hz) | | ASTM D 150 | 2,1 |
| Dissipation factor | | ASTM D 150 | <0,0002 |
| Volume resistivity | Ohm/cm | ASTM D 257 | 10 ¹¹ |
| Surface resistivity | Ohm | ASTM D 257 | 10 ¹⁰ |
| Arc-resistance (420 sec) | sec | ASTM D 495 | OK (2) |

Remarks:

All the properties have been determined at 23°C.

(1) Speed 5 m/min; load 0,1 MPa, sliding surface steel roughness Ra = 0,4 ÷ 0,6 micron.

(2) Without defects.

(3) cm³ x min x 10⁻⁸ / kg x m x h