PTFE 25% GF POLYTETRAFLUORETHYLEN WITH GLASS FIBRE

Material description

PTFE with glass is a so-called compound, i.e. a mixture of pure virgin PTFE with approximately 25 percent glass by weight. This additive increases the compressive strength and wear resistance. PTFE with glass is not recommended for dynamic sliding applications because of the glass abrasion.

Conformities

RoHS, REACH

| Physical properties | Test method | Value | Unit |
|----------------------------------|-------------------|------------------|-----------------------|
| Density | DIN EN ISO 1183-1 | 2.2 | g/cm3 |
| Water absorbtion | DIN EN ISO 62 | 0.03 | % |
| Sliding friction | | \bigcirc | |
| Abrasion resistance | | \bigcirc | |
| Mechanical properties | Test method | Value | Unit |
| Yield stress | DIN EN ISO 527 | 13 | MPa |
| Elongation at break | DIN EN ISO 527 | 180 | % |
| Shore Hardness D | ISO 868 | 58 | |
| Thermal properties | Test method | Value | Unit |
| Thermal conductivity | DIN 52612-2 | 0.41 | W/(m*K) |
| Coefficient of thermal expansion | DIN 53752 | 77-112 | 10 ^{-6*K} -1 |
| Operating temperature short term | | 300 | °C |
| Operating temperature long term | | 260 | °C |
| Flammability | UL 94, 3 mm | VO | |
| Electrical properties | Test method | Value | Unit |
| Volume resistivity | IEC 60093 | 10 ¹⁵ | Ω * cm |
| Surface resistivity | IEC 60093 | 10 ¹⁴ | Ω * cm |

These technical data have been determined as average values by our suppliers from many individual measurements. In all measurements, the test specimens were tested in the dry state. We pass on the data with reservation. The table does not claim to be complete or correct. Material technology is subject to constant further development. No rights or guarantees can be derived from it. Own tests are necessary because the environmental and operating conditions (humidity, temperature, mechanical forces, radiation and chemicals, etc.) set limits in the application.



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