

Datenblatt PTFE

| Property | Method | Units | Specification |
|---|-------------|--------------------|------------------|
| Specific gravity | ISO 13000-2 | g/cm ³ | 2,130-2,180 |
| Tenesile strength | ISO 13000-2 | MPa | ≥20 |
| Elongation | ISO 13000-2 | % | ≥200 |
| Hardness | ISO 13000-2 | Shore D | ≥54 |
| Ball Hardness | ISO 13000-2 | Mpa | ≥23 |
| Compression strengt hat 1% deformation | | Kg/cm ² | ≥70 |
| Deformation under load (140 Kg/cm ² for 24 hrs. at 23°C) | ASTM D621 | % | 10-13 |
| Permanent deformation (after 24hrs. Realaxation at 23° C) | ASTM D621 | % | 6-7,5 |
| Coefficient of static friction | ASTM D1894 | | 0,08-0,10 |
| Coefficient of dynamic friction | ASTM D1894 | | 0,06-0,08 |
| Thermal conductivity | ASTM C 177 | W / m·K | 0,24 |
| Dielectric constant (ε) at 60 Hz to 2 GHz | ASTM D 150 | / | 2,1 |
| Dielectric Strenght | ASTM D 149 | KV/mm | 20-70 |
| Volume resistivity | ASTM D 257 | Ohm·cm | 10 ¹⁸ |
| Flamability | UL 94 | | VE-0 |
| Water absorpion | ASTM D570 | % | 0,01 |

Service Temperature

- Excellent resistance to continuous service temperatures up to 260°C and for limited periods, even to hightemperatures; the low temperature resistance of the product allows satisfactory performance at as low -200°C.

Chemical resistance

- PTFE possesses a high inertness towards nearly all known chemicals. It is only attacked by elemental alkali metals, chlorine trifluoride and elemental fluorine at high temperature and pressures.

Solvents resistance:

- PTFE is insoluble in all solvents up to temperatures as high as 300° C (572° F). Certain highly fluorinated oils only swell and dissolve PTFE at temperatures close to the crystalline melting point.

FDA Approved

- (Code of Federal regulation 21 CFR Ch.1, revised as of April 1,1999Edition); sections 175.105 - 175.300 - 176.170 - 176.180 - 177.1520 – 177.1550 -177.2600 – 178.3570. “Perfluorocarbon Resins” of the Food and Drug Administration/USA.P.

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