

Application purpose and characteristics

For various components and sealing elements for applications in pneumatics and hydraulics. Chemically stressed components. Sliding elements which are claimed rather static (dynamic only hard counter surface partner). Suitable for contact with foodstuff.

Compared with PTFE virgin the glass fibres content increases the load capability and wear resistance, especially at higher temperatures. Chemical resistance is only negligibly restricted. The dielectric and anti-adhesive properties are reduced somewhat in

Material name, short description	PTFE
Material name, based on technical standards	Polytetrafluorethylene
Density	2.245 g/cm ³
Color	beige
Compound code	PTFE 125.011-00
Compound	PTFE +25% glass fibres

Mechanical properties

Tensile strength	≥ 13 N/mm ² ASTM D 4894
Elongation at break	≥ 180 % ASTM D 4894
Compressive strength 1	≥ 9 N/mm ² at 1% deformation
Residual deformation after 24h	≤ 6.5 % ASTM D 621 after 24h, Relaxation at 23°C
Deformation under load 1	≤ 11 % ASTM D 621 14N/mm ² , 24h at 23°C
Hardness nominal value	60 Shore D
Friction coefficient (static)	0.17 to 0.19 ASTM D 1894
Friction coefficient (dynamic)	0.15 to 0.17 ASTM D 1894

Thermal attributes

Min. operating temperature	-200 °C
Max. operating temperature long term	260 °C
Coefficient of linear thermal expansion 1	7.7 - 11.2 ASTM D 696 25 to 100°C

Approvals / Compliance

Food & Beverage	FDA CFR 21 - 177.1550 "Perfluorocarbon resins"
	D.M. 21/03/1973
	EC No. 1935/2004 incl. last amendments
	Regulation EU 10/2011



EC No.1935:2004



In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.