

Application purpose and characteristics

Sliding- guiding- and sealing-elements which require low friction and the protection of the mating partner and where contact with foodstuffs is required.

Very low coefficient of friction and good wear resistance, very low wear on soft mating partner surface, good mechanical strength, chemically inert, good dielectric properties.

Material name, short description	PTFE
Material name, based on technical standards	Polytetrafluorethylene
Density	2.06 g/cm ³
Color	white
Compound code	PTFE HP125.013-00
Compound	PTFE + polymer

Mechanical properties

Tensile strength	20 N/mm ² ISO 527-1 Cross Direction, test speed 50 mm/min
Elongation at break	250 % ISO 527-1 Cross Direction, test speed 50 mm/min
Compressive strength 1	8 N/mm ² ASTM D 695 1% deformation
Residual deformation after 24h	8 % ASTM D 621
Deformation under load 1	13 % ASTM D 621 P=13.7 N/mm ² , 24 h
Hardness test value	65 Shore D
Friction coefficient (static)	0.05 to 0.15 ASTM D 3702
Friction coefficient (dynamic)	0.1 to 0.2 ASTM D 3702 PV=0,7 N/mm ² * m/s
Sliding wear	0.012 - 0.018 μm/h ASTM D 3702 PV=0,7 N/mm ² * m/s

Thermal attributes

Min. operating temperature	-200 °C
Max. operating temperature long term	280 °C
Coefficient of linear thermal expansion 1	11 * 10 ⁻⁵ /°C ASTM D 696 25 - 95 °C

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.

Approvals / Compliance

Food & Beverage

FDA CFR 21 - 177.1550 "Perfluorocarbon resins"

EC No. 1935/2004 incl. last amendments

Regulation EU 10/2011

Regulation EU 10/2011 incl. last amendments



EC No.1935:2004



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