

Raw Material Polytetrafluoroethylene (PTFE)

General Properties	Test Method	Unit	Value
Density	ISO 1183	g/cm ³	2.18
Water Absorption In Air 50% r.h.	ISO 62	%	-
Absorption 23-C In Water-Saturation	ISO 62:1999(modified)	%	-
Food Compliance	-	FDA/BfR	YES
UV Stability	-	-	YES
Mechanical Properties			
Tensile Strength At Yield At Break	ISO 527-1/2:1993	N/mm ²	25
Elongation at Break	ISO 527-1/2:1993	%	280
Tensile Modulus Of Elasticity	ISO 527-1/2:1993	N/mm ²	-
Impact Strength Charpy 7.5 J	ISO 604:2002	KJ/mm ²	-
Notched Impact Strenght Charpy	ISO 180:2000	KJ/mm ²	-
Compression Test 1% Strain 1000h	-	N/mm ²	4
Shore Hardness (D)	ISO 868:2003	Scale D	55
Coefficient Of Friction To Steel	ISO 8295	-	0.09
Thermal Properties			
Melting Temperature	ISO 3146	°C	330
Thermal Conductivity	ISO 8301:1991	W/(km)	0.20
Deformation at temperature HDT	ISO 75	°C	-
Linear Expansion Coeficient (23-60°C)	ISO 11359-2:1999	10 ⁻⁶ K ⁻¹	160
Minimum Operating Temperature	Average	°C	-200
Operating Temperature Continuously	Average	°C	250
Operating Tem Short Period-no load	Average	°C	260
Flammability	UL 94 (3-6mm thickness)	-	-
Electrical Properties			
Dielectric Constant at 1 MHz	ISO 250	-	2.1
Dissipation Factor Tan Δ at 1 MHz	ISO 250	-	0.0002
Volume Resistivity	ISO 93	Ωcm	1 x 10 ¹⁷
Dielectric Strength	ISO 243	KV/mm	55

Applications:

- Compressor Valves & Rings
- Transmission Components
- Centrifugal Pump Wear Parts
- Etch Rings

Characteristics:

- Excellent Mechanical Properties
- Excellent Thermal Properties
- Superior Wear / Creep Resistance
- Physiologically Inert



All information contained in this literature corresponds with our current knowledge of the products. Tynic Automation assume no liability whatsoever in respect of application, conversion or use made of the aforementioned information or products, or any consequence thereof. The buyer undertakes all liability in respect of the application, conversion or use of the aforementioned information or products. Existing intellectual property rights must be observed and Tynic Automation reserve the right to make technical alterations.