

PTFE BRONZE 40% + MOS2 | POLYTETRAFLUOROETHYLENE

► Main features

Excellent anti-wear properties, better thermal properties and electrical conductivity.
Experiences reduced deformation under work load.

► Applications

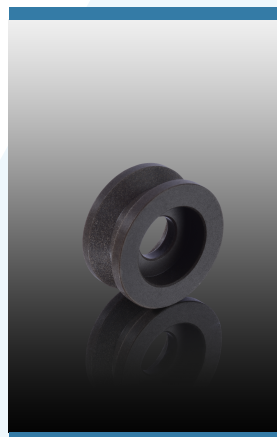
Construction of tanks and chemical plants
Electronics
Oils and gas
Mechanical engineering
Food industries
Wind energy

► Application sectors

Pumps and fluid management
Power Plant, Offshore, Oil & Gas
Mechanic
Industrial automation
Electrical and Semiconductor

► FDA Compatibility NO

► Available colours



PHYSICAL PROPERTIES

REGULATIONS

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PTFE BRONZE 40%+MOS

PHYSICAL PROPERTIES			
Density	DIN53479	g/cm ³	3.25
Water absorption (50% at 23° C)	**DIN53495	%	-
Maximum temp. for use in the air for short duration	-	°C	-
Maximum temperature of use in continuous air	-	°C	260
Minimum temperature of use in continuous air	-	°C	-200

MECHANICAL PROPERTIES			
Yield stress/tensile strength (σ_s)	*DIN53455 (4)	N/mm ²	>20
Elongation at break (ϵ_s)	DIN53455	%	>200
Breaking load (σ_r)	DIN53455	N/mm ²	23-28
Elongation at break (ϵ_r)	*DIN53455 (4)	%	200-250
Impact resistance	*DIN53453	kJ/m ²	-
Impact resistance, notched test	*DIN53453	kJ/m ²	-
Rockwell hardness	DIN53465	Scala M	-
Compression test, load 1% deform. nominal	*DIN53454 (3)	N/mm ²	6.5-8
Elasticity module	*DIN53457 (5)	N/mm ²	-

THERMIC PROPERTIES			
Melting temperature	-	°C	-
VICAT softening temperature	DIN53460	°C	-
Deformation temperature under bending load	DIN53461	°C	-
Coefficient of linear thermal expansion (α)	DIN53752	K ⁻¹ X10 ⁻⁵	9-12
Thermal conductivity at 23°	DIN52612	W/(Kxm)	-

ELECTRICAL PROPERTIES			
Volume resistivity	**DIN53482	Ω /cm	10 ⁷
Surface resistivity	**DIN53482	Ω	10 ⁹
Dielectric constant at 10 ³ HZ (on thickness of 1 mm.)	**DIN53483	-	-
Dielectric dissipation factor (tan δ) a 10 ³ HZ	**DIN53483	-	-
Dielectric strength (on thickness of 1 mm.)	**DIN53481	kV/mm	-
Electrical leakage resistivity	112/030TI	-	-

OTHER PROPERTIES			
Possibility of gluing	-	-	No
Absence of physiological risks	FDA	-	No
Dry friction coefficient on steel	DIN53375	-	0,13
Flammability	UL94	-	-
UV stability	-	-	-

* : MEASUREMENTS ON TEST TUBES IN ANHYDROUS STATE

** : MEASUREMENTS ON EQUILIBRIUM TUBES
WITH U.R. 50% AT A TEMPERATURE OF 23° C

(3): ON CYLINDERS Ø 12X30 MM

(5): TRACTION SPEED 1 MM / MIN

(4): TRACTION SPEED 5 MM/MIN

(6): TRACTION SPEED 20 MM/MIN