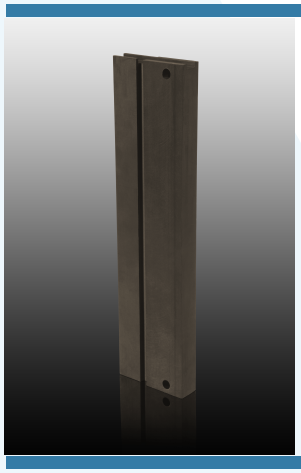
PTFE BRONZE 60% | POLYTETRAFLUOROETHYLENE



Main features

Excellent wear resistance, high compressive strenght and good thermal conductivity; not very resistance to chemical agents.

Applications

Support surfaces and runners even with high loads and with alternating movement, bearing without lubrification.

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	UM	PTFE BRONZE 60%
PHYSICAL PROPERTIES			
Density	DIN53479	g/cm³	3.90
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/mm²	15
Elongation at break (ε_s)	DIN53455	%	100-140
Breaking load (σ_r)	DIN53455	N/mm²	17-23
Elongation at break (ε_r)	*DIN53455 (4)	%	100-160
Impact resistance	*DIN53453	kJ/m²	-
Impact resistance, notched test	*DIN53453	kJ/m²	-
Rockwell hardness	DIN53465	Scala M	65
Compression test, load 1% deform. nominal	*DIN53454 (3)	N/mm²	13
Elasticity module	*DIN53457 (5)	N/mm²	-
THERMIC PROPERTIES			
Melting temperature	-	°C	-
VICAT softening temperature	DIN53460	°C	-
Deformation temperature under bending load	DIN53461	°C	-
Coefficient of linear thermal expansion (α)	DIN53752	KX10 $^{-5}$	9
Thermal conductivity at 23°	DIN52612	W/(Kxm)	0.74
ELECTRICAL PROPERTIES			
Volume resistivity	**DIN53482	Ω/cm	10 ^{10}
Surface resistivity	**DIN53482	Ω	10 ^{11}
Dielectric constant at 10³ HZ (on thickness of 1 mm.)	**DIN53483	-	-
Dielectric dissipation factor (tan δ) a 10³ 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	-	0,06
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

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