

MAIN FEATURES

Moderate electrical insulation capacity, good chemical resistance and good mechanical properties make it an extremely versatile material suitable for mechanical applications in general.

Applications

Shoes
guides
pulleys
profiles
wheels
rollers

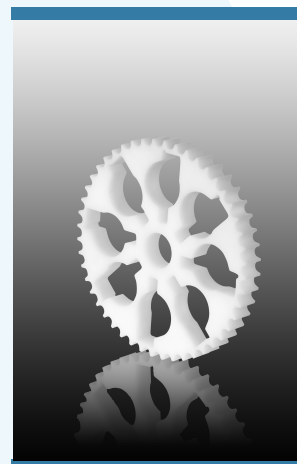
Application sectors

Mechanical
Medical & Pharmaceutical
Aerospace
Food
Automotive

FDA Compatibility

Yes

Available colours



PROPERTIES

REGULATIONS

UM

PA6 (b/w)

PHYSICAL PROPERTIES

Density	DIN53479	g/cm ³	1.14
Water absorption (50% at 23° C)	**DIN53495	%	2,7
Maximum temp. for use in the air for short duration		°C	160
Maximum temperature of use in continuous air		°C	80÷100
Minimum temperature of use in continuous air		°C	-40

MECHANICAL PROPERTIES

Yield stress/tensile strength (σ_s)	*DIN53455 ⁽⁴⁾	N/mm ²	79
Elongation at break (ϵ_s)	DIN53455	%	-
Breaking load (σ_r)	DIN53455	N/mm ²	-
Elongation at break (ϵ_r)	*DIN53455 ⁽⁴⁾	%	>50
Impact resistance	*DIN53453	kJ/m ²	NR
Impact resistance, notched test	*DIN53453	kJ/m ²	4
Rockwell hardness	DIN53465	Scala M	M82
Compression test, load 1% deform. nominal	*DIN53454 ⁽³⁾	N/mm ²	82
Elasticity module	*DIN53457 ⁽⁵⁾	N/mm ²	3200

THERMIC PROPERTIES

Melting temperature	-	°C	220
VICAT softening temperature	DIN53460	°C	-
Deformation temperature under bending load	DIN53461	°C	75
Coefficient of linear thermal expansion (α)	DIN53752	K ⁻¹ X10 ⁻⁴	0,8
Thermal conductivity at 23°	DIN52612	W/(Kxm)	0,28

ELECTRICAL PROPERTIES

Volume resistivity	**DIN53482	Ω /cm	10 ¹⁴
Surface resistivity	**DIN53482	Ω	10 ¹⁴
Dielectric constant at 10 ³ HZ (on thickness of 1 mm.)	**DIN53483	-	8
Dielectric dissipation factor (tan δ) a 10 ³ HZ	**DIN53483	-	>>0,2
Dielectric strength (on thickness of 1 mm.)	**DIN53481	kV/mm	>15
Electrical leakage resistivity	112/030TI	-	CTI600

OTHER PROPERTIES

Possibility of gluing	-	-	No
Absence of physiological risks	FDA	-	No
Dry friction coefficient on steel	DIN53375	-	0,25÷0,35
Flammability	UL94	-	HB
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