

PA 6 G+MOS2 | POLYAMIDES

MAIN FEATURES

Excellent sliding properties, anti-wear and self-lubricating; increase in rigidity, tensile strength and temperature due mainly to the presence of molybdenum sulphide.

Applications

Particularly suitable for the production of bearings, gears and other mechanical parts subjected to temperature above 60° C

Application sectors

Machines for building industry and lifting
Waste collection and management
Agricultural
Industrial automation
Power Plant, Offshore,
Oil & Gas

FDA Compatibility

No

Available colours



PROPERTIES

REGULATIONS

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PA6 G + MOS2

PHYSICAL PROPERTIES

Density	DIN53479	g/cm ³	1.15
Water absorption (50% at 23° C)	**DIN53495	%	2,2
Maximum temp. for use in the air for short duration		°C	170
Maximum temperature of use in continuous air		°C	110÷120
Minimum temperature of use in continuous air		°C	-40

MECHANICAL PROPERTIES

Yield stress/tensile strength (σ_s)	*DIN53455 (4)	N/mm ²	86
Elongation at break (ϵ_s)	ISO527	%	4
Breaking load (σ_r)	DIN53455	N/mm ²	-
Elongation at break (ϵ_r)	ISO527	%	55
Impact resistance	*DIN53453	kJ/m ²	NR
Impact resistance, notched test	*DIN53453	kJ/m ²	4
Rockwell hardness	DIN53465	Scala M	M86
Compression test, load 1% deform. nominal	*DIN53454 (3)	N/mm ²	88
Elasticity module	*DIN53457 (5)	N/mm ²	3500

THERMIC PROPERTIES

Melting temperature	-	°C	220
VICAT softening temperature	DIN53460	°C	-
Deformation temperature under bending load	DIN53461	°C	95
Coefficient of linear thermal expansion (α)	DIN53752	K ⁻¹ X10 ⁻⁴	0,8
Thermal conductivity at 23°	DIN52612	W/(Kxm)	0,29

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	-	7
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	-	-	Limited
Absence of physiological risks	FDA	-	No
Dry friction coefficient on steel	DIN53375	-	0,25÷0,3
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