

POLYAMIDE 6 (PA6)

Nylon 6 Polyamide

Nylon 6 is a semi-crystalline polyamide polymer obtained through polymerization of caprolactam. It is a thermoplastic frequently used eg in the construction of components of machines.

It is not resistant to strong acids, but has an excellent resistance to wear and weathering. It absorbs moisture. Even when subjected to continuous efforts maintains its performance.

Technical details: Raw Material of polyamide 6 (PA6): standard color black, white.

Specific Gravity: 1.20



MECHANICAL PROPERTIES

Temperature of use	Density	Yield Stress	Breakdown Voltage	Modulus of elasticity (tension)	Modulus of elasticity (tension)	Modulus of elasticity (bending)	Hardness Test	Breaking Strength	Resistance Elongation	Wear Creep
C°	g/cm³	Mpa	Mpa	%	MPa	MPa	MPa	MPa	μ/km	
100	1,13	85/60		70/200	3000/1800		160/70	45	4,5	0,23

THERMAL PROPERTIES

Melting Temperature	Glass Transition Temperature	Hot Dimensional Stability (met. A)	Hot Dimensional Stability (met. B)	Use Temperature Limit	Thermal Conductivity	Heat Capacity	Coefficient of Thermal Expansion
C°	C°	C°	C°	C°	W/K.m	J/K.m	10 1/K
220	60/5	75	190	160	0,23	1,7	8

ELECTRICAL PROPERTIES

Constant Dielectric	Dielectric Loss Factor	Specific Bulk Resistivity	Surface Resistivity	Rigidity Dielectric	Resistance to Leakage Current
abs	Tan δ	Ω.cm	Ω	kV/mm	class
3,7/7	0,031-0,300	10 ¹³	10 ¹²	20/50	CT/600

VARIOUS PROPERTIES

Moisture Absorption	Water Absorption until Saturation	Specific Bulk Resistivity
%	%	
3	9,5	HB