

Epramid® 6

A standard extruded polyamide that is universally applicable in the industry. The material is tough and highly impact resistant. The abrasion resistance is excellent. PA6 has excellent resistance to oils, greases and most detergents. It is not resistant to acids and alkalis.

General properties	Test method	Value	Unit
ISO code:	ISO 1183	PA6E	
Density:	ISO 1183-1	1,14	g/cm3
Water absorption in Air (23°C / 50% RH)	ISO 62	2,6	%
Water absorption in Air (23°C / 100% RH)	ISO 62	9	%
Resistance to hot water	n/a	=	
Weather resistance	n/a	-	
Mechanical properties			
Elongation at break:	ISO 527	>50	%
Ball indentation hardness	ISO 2039	150	MPa
Tensile modules of elasticity	ISO 527	3200	MPa
Charpy impact strength - notched	ISO 179	5	kJ/m2
Charpy impact strength - unnotched	ISO 179	No Break	kJ/m2
Compressive stress at 1%	n/a	24	MPa
Coefficient of friction	ASTM D 1894	0,4-0,6	
Thermal properties			
Melting temperature	n/a	220	°C
Max. allowable service temp (short period)	n/a	160	°C
Max. allowable service temp (long period)	n/a	80	°C
Min. service temperature	n/a	-40	°C
Coefficient of linear expansion	n/a	70	x10 -6 m/(m*K)
Flammability	UL94	HB	
Electrical properties			
Dielectric dissipation (at 1MHz)	ISO 60250	0,02	Ω
Electric strength	ISO 60243	20	kV/mm
Volume resistivity	ISO 60093	>10^14	Ω.cm