

PA Hardness 85° Shore D Natural

Polyamide

Mechanical, physical and thermal properties

Properties	Condition	Standard	Unit			
Colour				Natural		Natural
Density/specific gravity	23°C	DIN 53479	Kg/m ³	1130	g/cm ³	1,13
Hardness	23°C	ISO 868	Shore D	85±3	Shore D	85±3
Ball indentation hardness	23°C	DIN 53456 H135/30	MPa	153	Psi	22200
Tensile strength	23°C	ASTM D 4745-79	MPa	80	Psi	11600
Elongation at break	23°C	ASTM D 4745-79	%	40	%	40
Compressive strength	23°C	DIN 53455	MPa	110	Psi	16000
Thermal conductivity	23°C	DIN 52612	$\frac{J \times 10^3}{m \times h \times K}$	0,29	$\frac{J \times 10^3}{m \times h \times K}$	0,29
Coefficient of thermal expansion	23°C-200°C		K ⁻¹ × 10 ⁻⁵	8	K ⁻¹ × 10 ⁻⁵	8
Coefficient of friction	*		μ	0,4	μ	0,4
Minimum service temperature			°C	-40	°F	-40
Maximum service temperature			°C	110	°F	230
Young's modulus		DIN 53457	MPa	3000	Psi	435000

* dynamic coefficient of friction, dry, steel 16MnCr5: v=0,6 m/s; p=0,05 MPa; t=5h

Chemical Properties**Homopolymere, based on caprolactam**

Resistant to: Lubricants, fuels, solvents, natural oil and greases, water, ester and ketones

Not resistant to: strong acids and lyes

Detailed information concerning chemical resistance see Rhondama Compatibility Chart