



## TECHNICAL DATA SHEET NYLON (WEARLON®)

	Unit	Test method	PA 6G	PA 6	PA 66
<b>Mechanical properties</b>					
Density	g/cm <sup>3</sup>	DIN 53 479	1.15	1.14	1.14
Tensile strength (short duration)	MPa	DIN 53 455	80	70	85
Modulus of elasticity in flexure (short duration)	GPa	DIN 53 457	3.4	2.5	2.9
Modulus of elasticity in tension (short duration)	GPa	DIN 53 457	3.1	2.7	3
Bending strength	MPa	DIN 53 452	140	130	135
Impact strength	kJ/m <sup>2</sup>	DIN 53 453	n.B.	n.B.	n. B.
Notch impact strength	kJ/m <sup>2</sup>	DIN 53 453	>4	>3	>3
Ball indentation hardness	MPa	DIN 53 456	160	160	170
H358/30					
Sliding friction coefficient against hardened and ground steel (P=0.05 Mpa, V=0.6 m/sec., T=40 °C (near sliding surface))	-	-	0.36	0.38	0.35
<b>Thermal properties</b>					
Melting temperature	°C	-	220	218	265
Coefficient of thermal expansion in 23°C - 60°C range	10 <sup>-5</sup> . K <sup>-1</sup>	DIN VDE 0304	7 - 8	8 - 9	9 - 10
Operating temperature range (long-term)	°C		-40 to 105	-60 to 100	-30 to 100
Operating temperature range (short-term) up to 60mins.	°C	-	170	140	150
Thermal conductivity	W/(K.m)	DIN 52 612	0.23	0.23	0.23
Moisture absorption in 23 °C / 50 % RH	%	DIN 53 715	2.2	3.0	2.5
Moisture absorption in water until saturated	%	DIN 53 495	6.5	10.0	9.0

### Application

- Bearings.
- Guide rails.
- Chain wheel guides.
- Bushes.
- Guides and Crane support / sheaves.
- Idler and guide rollers.
- Gear and chain wheels and pinions.
- Mixer blades and pump wheels.

### Standard Options

SHEET: Natural & Black Carbon filled - 2000mm x 1000mm in 2mm to 100mm thick.

ROLLS: Natural - 1000mm wide and 0.25mm to 1.5mm thick.

EXTRUDED ROD: Natural & Black Carbon filled - Ø5 mm to Ø45mm in 1000mm & 3000mm lengths.

CAST ROD: Natural & Black Carbon filled - Ø50mm to Ø300mm in 1000mm & 3000 mm lengths.

CAST TUBE: Natural & Black Carbon filled – Up to Ø200mm ID and greater in 1000mm lengths.