



PAR (MANCHESTER) LTD

Warre Street
Ashton-Under-Lyne
Lancashire
OL6 8NW
t : +44(0) 161 339 6600
f : +44(0) 161 343 2088
e : sales@par-group.co.uk

PAR (PRESTON) LTD

Club Street
Bamber Bridge
Lancashire
PR5 6FN
t : +44(0) 1772 322 114
f : +44(0) 1772 627 524
e : preston@par-group.co.uk

PAR (YORKSHIRE) LTD

Warre Street
Ashton-Under-Lyne
Lancashire
OL6 8NW
t : +44(0) 1924 444 529
f : +44(0) 161 343 2088
e : sales@par-group.co.uk

Nylon 66

Nylon 66 is a semi-crystalline engineering thermoplastic with universal applications.

The main characteristics of Nylon 66 are:

- It has good sliding properties
- Is very abrasion resistant
- Resistant to many oils, greases, diesel, petrol, cleaning fluids
- Strong and tough
- Rigid
- Electrically insulating
- Easily machined
- Easily welded and bonded

The preferred fields for the use of Nylon 66 are: mechanical engineering, automotive engineering, transport and conveyor technology, textile, packaging and paper processing machinery, printing and drinks dispensing machinery, household articles, electrical engineering, building machinery, and agricultural machinery

Popular applications for the use of Nylon 66 are:

- Gear wheels
- Friction strips
- Bushes, spindle nuts
- Piston guides
- Castors
- Impact plates
- Friction bearings
- Conveyor screws
- Cam discs
- Rope pulleys
- Plug parts
- Damping plates



PAR (MANCHESTER) LTD

Warre Street
Ashton-Under-Lyne
Lancashire
OL6 8NW
t : +44(0) 161 339 6600
f : +44(0) 161 343 2088
e : sales@par-group.co.uk

PAR (PRESTON) LTD

Club Street
Bamber Bridge
Lancashire
PR5 6FN
t : +44(0) 1772 322 114
f : +44(0) 1772 627 524
e : preston-sales@par-group.co.uk

PAR (YORKSHIRE) LTD

Warre Street
Ashton-Under-Lyne
Lancashire
OL6 8NW
t : +44(0) 1924 444 529
f : +44(0) 161 343 2088
e : sales@par-group.co.uk

Technical Information

Information to be used as a guide only. It corresponds with our current knowledge and indicates possible applications. We cannot guarantee suitability for a specific application. Unless otherwise stated these values represent averages taken from injection moulded samples.

Properties	Unit	Test Method DIN ASTM	Result Dry	Result Wet*
Mechanical				
Density	g/cm ³	53479	1.14	-
Tensile strength at yield	MPa	53455	90	70
Tensile strength at break	MPa	53455	-	-
Elongation at Break	%	53455	40	150
Modulus of elasticity in tension	MPa	53457	3300	2000
Modulus of elasticity in flexure	MPa	53457	2830	-
Ball indentation hardness	MPa	53456	170	100
Impact strength (Charpy)	KJ/m ²	53453	no break	-
Creep rupture strength after 1000 hours with static load	MPa	-	55	-
Time yield limit for 1% elongation after 1000 hours	MPa	-	8	-
Coefficient of friction against hardened and ground steel p+0,05 N/mm ² , v=0,6 m/s	-	-	0.35 - 0.42	-
Wear conditions as above	um/km	-	0.9	-
Thermal				
Crystalline melting point	°C	53736	255	-
Glass transition temperature	°C	53736	50	5
Heat distortion temperature method A	°C	ISO 75	100	-
Heat distortion temperature method B	°C	ISO 75	>200	-
Max. service temperature short term	°C	-	170	-
Max. service temperature long term	°C	-	100	-
Coefficient of thermal conductivity	W/(m K)	-	0.23	-
Specific heat	J/(g K)	-	1.7	-
Coefficient of thermal expansion	10 ⁻⁵ /K	-	7	-
Electrical				
Dielectric constant at 10 (5) Hz	-	53483	3.6	5.0
Dielectric loss factor at 10(5) Hz	-	53483	0.026	0.2
Specific Volume Resistance	Ωcm	53482	10 (15)	10 (12)
Surface Resistance	Ω	53482	10 (13)	10 (12)
Dielectric strength 1mm	kV/mm	53481	>30	28
Tracking resistance	-	53480	CTI600	CTI600
Miscellaneous				
Moisture Absorption: Equilibrium in standard atmosphere (23°C / 50% relative humidity)	%	53714	2.8	-
Water absorption at saturation at 23°C	%	53495	8.5	-
Resistance to hot water, washing soda	-	-	limited resistance	-
Flammability	-	UL 94	V2	-
Resistance to weathering	-	-	not resistant	-

*after storage in a standard 23/50 atmosphere (DIN 50 014) to equilibrium