



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 : prestonales@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

Delrin®

Delrin® (Polyoxymethylene) is a semi-crystalline thermoplastic engineering material with high strength and rigidity, excellent machinability and varied applications.

The main characteristics of Delrin® are:

- Strong and rigid
- Tough
- Good sliding properties
- Resistant to dilute acids, cleaning agents and numerous solvents
- Very good electrical insulation
- easily machined and polished
- Not resistant long term to water over 60°C
- Easily welded

The preferred fields for the use of Delrin® are in mechanical engineering, automotive engineering, transport and conveyor technology, electrical engineering, precision engineering, household appliances and plant construction.

Typical applications for Delrin® include

- Friction bearings
- Gears
- Spring elements
- Housing parts
- Rollers
- Friction strips
- plugs
- Insulators
- Snap fit connectors
- Seals



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

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
Mechanical	-	-	-
Density	g/cm ³	534 79	1.42
Tensile strength at yield	MPa	534 55	70
Tensile strength at break	MPa	534 55	-
Elongation at Break	%	534 55	40
Modulus of elasticity in tension	MPa	534 57	3300
Modulus of elasticity in flexure	MPa	534 57	2620
Ball indentation hardness	MPa	534 56	170
Impact strength (Charpy)	KJ/m ²	534 53	no break
Creep rupture strength after 1000 hours with static load	MPa	-	40
Time yield limit for 1% elongation after 1000 hours	MPa	-	13
Coefficient of friction against hardened and ground steel p+0,05 N/mm ² , v=0,6 m/s	-	-	0.34
Wear conditions as above	µm/km	-	4.6
Thermal	-	-	-
Crystalline melting point	°C	537 36	175
Glass transition temperature	°C	537 36	-38
Heat distortion temperature method A	°C	ISO 75	124
Heat distortion temperature method B	°C	ISO 75	170
Max. service temperature short term	°C	-	150
Max. service temperature long term	°C	-	100
Coefficient of thermal conductivity	W/(m K)	-	0.31
Specific heat	J/(g K)	-	1.5
Coefficient of thermal expansion	10 ⁻⁵ /K	-	10
Electrical	-	-	-
Dielectric constant at 10 (5) Hz	-	534 83	3.7
Dielectric loss factor at 10(5) Hz	-	534 83	0.005
Specific Volume Resistance	Ωcm	534 82	10 (15)
Surface Resistance	Ω	534 82	-
Dielectric strength 1mm	kV/mm	534 81	>50
Tracking resistance	-	534 80	KA 3c
Miscellaneous	-	-	-
Moisture Absorption: Equilibrium in standard atmosphere (23°C / 50% relative humidity)	%	537 14	0.3
Water absorption at saturation at 23°C	%	534 95	0.5
Resistance to hot water, washing soda	-	-	Not resistant
Flammability	-	UL 94	HB
Resistance to weathering	-	-	Not resistant