

Delrin Black

POM-H (Polyacetal - Homopolymer)

Colour: Black

Density: 1.43g/cm³

Material Data Sheet

Mechanical Properties	Parameter	Value	Unit	DIN/EN/ISO
Modulus of elasticity (tensile test)	1mm/min	3600	MPa	527-2
Tensile strength	50mm/min	80	MPa	527-2
Tensile strength at yield	50mm/min	80	MPa	527-2
Elongation at Yield	50mm/min	32	%	527-2
Elongation at break	50mm/min	43	%	527-2
Flexural strength	2mm/min 10N	106	MPa	178
Modulus of elasticity (flexural test)	2mm/min 10N	3600	MPa	178
Compression Strength	1%/2% 5mm/min 10N	22/38	MPa	604
Compression modulus	5mm/min 10N	2800	MPa	604
Impact strength (Charpy)	Max. 7,5J	N.B.	kJ/m ²	179-1eU
Notched impact strength (Charpy)	Max. 7,5J	14	kJ/m ²	179-1eA
Ball indentation hardness	-	185	MPa	2039-1

Thermal Properties	Parameter	Value	Unit	DIN/EN/ISO
Glass transition temperature	-	-60	°C	53765
Melting temperature	-	182	°C	53765
Service temperature	Short term	150	°C	-
Service temperature	Long term	110	°C	-
Thermal expansion (CLTE)	23-60°C, Long	11	10 ⁻⁵ K ⁻¹	11359-1;2
Thermal expansion (CLTE)	23-100°C, Long	11	10 ⁻⁵ K ⁻¹	11359-1;2
Specific heat	-	1.3	J/(g*K)	22007-4:2008
Thermal conductivity	-	0.43	W/(K*m)	22007-4:2008

Electrical properties	Parameter	Value	Unit	DIN/IEC
Surface resistance	-	>10 ¹²	Ω	60093

Other properties	Parameter	Value	Unit	DIN/EN/ISO/IEC
Water absorption	24h/96h (23°C)	0.05/0.1	%	62
Resistance to hot water/bases	-	-	-	-
Resistance to weathering	-	-	-	-
Flammability (UL94)	Corresponding to	HB	-	60695-11-10



Direct Plastics Ltd. Unit 14 Portland Business Park, Richmond Park Road, Sheffield, S13 8HS

Tel: 0114 2560889 Email: sales@directplastics.co.uk

The following information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. Existing commercial patents must be observed. A definitive quality guarantee is given in our general conditions of sales.

Unless otherwise stated, these values represent averages taken from injection moulding samples.

We reserve the right of technical alterations.

Delrin Natural

DirectPlastics

...not just a quicker delivery!

POM-H (Polyacetal - Homopolymer)

Colour: Natural

Density: 1.43g/cm³

Material Data Sheet

Mechanical Properties	Parameter	Value	Unit	DIN/EN/ISO
Modulus of elasticity (tensile test)	1mm/min	3400	MPa	527-2
Tensile strength	50mm/min	79	MPa	527-2
Tensile strength at yield	50mm/min	79	MPa	527-2
Elongation at Yield	50mm/min	37	%	527-2
Elongation at break	50mm/min	45	%	527-2
Flexural strength	2mm/min 10N	106	MPa	178
Modulus of elasticity (flexural test)	2mm/min 10N	3600	MPa	178
Compression Strength	1%/2% 5mm/min 10N	19/33	MPa	604
Compression modulus	5mm/min 10N	2700	MPa	604
Impact strength (Charpy)	Max. 7,5J	N.B.	kJ/m ²	179-1eU
Notched impact strength (Charpy)	Max. 7,5J	15	kJ/m ²	179-1eA
Ball indentation hardness	-	185	MPa	2039-1

Thermal Properties	Parameter	Value	Unit	DIN/EN/ISO
Glass transition temperature	-	-60	°C	53765
Melting temperature	-	182	°C	53765
Service temperature	Short term	150	°C	-
Service temperature	Long term	110	°C	-
Thermal expansion (CLTE)	23-60°C, Long	12	10 ⁻⁵ K ⁻¹	11359-1;2
Thermal expansion (CLTE)	23-100°C, Long	13	10 ⁻⁵ K ⁻¹	11359-1;2
Specific heat	-	1.3	J/(g*K)	22007-4:2008
Thermal conductivity	-	0.43	W/(K*m)	22007-4:2008

Electrical properties	Parameter	Value	Unit	DIN/IEC
Surface resistance	-	10 ¹⁴	Ω	60093

Other properties	Parameter	Value	Unit	DIN/EN/ISO/IEC
Water absorption	24h/96h (23°C)	0.05/0.1	%	62
Resistance to hot water/bases	-	-	-	-
Resistance to weathering	-	-	-	-
Flammability (UL94)	Corresponding to	HB	-	60695-11-10



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