



Plastic Sales Ltd.

Plastic engineering For the trade.

Tel > 01202 677743

Email > sales@plasticsalesltd.co.uk

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

blue opaque

Density

1.41 g/cm³

Main features

- high strength
- high toughness
- good chemical resistance
- good machinability
- very good electrical insulation
- easy to polish
- difficult to bond
- good slide and wear properties

Target Industries

- food engineering
- conveyor technology
- mechanical engineering
- precision engineering
- automotive industry
- electrical engineering
- medical technology

Mechanical properties	parameter	value	unit	norm	comment
Modulus of elasticity (tensile test)	1mm/min	2800	MPa	DIN EN ISO 527-2	1) (1) For tensile test: specimen type 1b
Tensile strength	50mm/min	67	MPa	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
Tensile strength at yield	50mm/min	67	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
Elongation at yield	50mm/min	9	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0,5 and 1% compression.
Elongation at break	50mm/min	32	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
Flexural strength	2mm/min, 10 N	91	MPa	DIN EN ISO 178	n.b.= not broken
Modulus of elasticity (flexural test)	2mm/min, 10 N	2600	MPa	DIN EN ISO 178	(6) Specimen in 4mm thickness
Compression strength	1% / 2% 5mm/min, 10 N	20 / 35	MPa	EN ISO 604	3)
Compression modulus	5mm/min, 10 N	2300	MPa	EN ISO 604	4)
Impact strength (Charpy)	max. 7.5J	n.b.	kJ/m ²	DIN EN ISO 179-1eU	5)
Notched impact strength (Charpy)	max. 7.5J	9	kJ/m ²	DIN EN ISO 179-1eA	
Ball indentation hardness		158	MPa	ISO 2039-1	6)

Thermal properties	parameter	value	unit	norm	comment
Glass transition temperature		-60	°C	DIN 53765	1) (1) Found in public sources.
Melting temperature		166	°C	DIN 53765	(2) Found in public sources.
Service temperature	short term	140	°C		Individual testing regarding application conditions is mandatory.
Service temperature	long term	100	°C		2)
Thermal expansion (CLTE)	23-60°C, long.	13	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
Thermal expansion (CLTE)	23-100°C, long.	14	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	

Electrical properties	parameter	value	unit	norm	comment
Specific surface resistance	Silver electrode, 23°C, 12% r.h	10 ¹⁴	Ω	DIN IEC 60093	1) (1) Specimen in 20mm thickness
Specific volume resistance	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω*cm	DIN IEC 60093	2) (2) Specimen in 20mm thickness

Other properties	parameter	value	unit	norm	comment
Water absorption	24h / 96h (23°C)	0.05 / 0.1	%	DIN EN ISO 62	1) (1) Ø ca. 50mm, h=13mm
Resistance to hot water/ bases	(+)	-	-	-	2) (2) (+) limited resistance
Resistance to weathering	-	-	-	-	3) (3) - poor resistance
Flammability (UL94)	corresponding to	HB	-	DIN IEC 60695-11-10;	4) (4) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.

Plastic Sales Ltd
Unit 38a Bridge Street
Bailie Gate Industrial Estate
Dorset BH21 4DB

Tel: 01258 456798
Fax: 01202 901774
Email: sales@plasticsalesltd.co.uk

Directors: Registered in England No. 6876279
R M Jeffery VAT 973 414 803