

# POM C DATASHEET

<b>Mechanical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>
Tensile strength	50mm/min	67	MPa	DIN EN ISO 527-2
Modulus of elasticity (tensile test)	1mm/min	2600	MPa	DIN EN ISO 527-2
Tensile strength at yield	50mm/min	67	MPa	DIN EN ISO 527-2
Elongation at yield (tensile test)	50mm/min	9	%	DIN EN ISO 527-2
Elongation at break (tensile test)	50mm/min	32	%	DIN EN ISO 527-2
Flexural strength	2mm/min, 10 N	91	MPa	DIN EN ISO 178
Modulus of elasticity (flexural test)	2mm/min, 10 N	2600	MPa	DIN EN ISO 178
Compression strength	1% / 2% / 5% 5mm/min, 10 N	20/35/68	MPa	EN ISO 604
Compression modulus	5mm/min, 10 N	2300	MPa	EN ISO 604
Impact strength (Charpy)	max. 7,5J	<i>u.b.</i>	$\text{kJ/m}^2$	DIN EN ISO 179-1eU
Notched impact strength (Charpy)	max. 7,5J	8	$\text{kJ/m}^2$	DIN EN ISO 179-1eA
Ball indentation hardness		165	MPa	ISO 2039-1
<b>Thermal properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>
Glass transition temperature		-60	°C	DIN EN ISO 11357
Melting temperature		166	°C	DIN EN ISO 11357
Service temperature	short term	140	°C	
Service temperature	long term	100	°C	
Thermal expansion (CLTE)	23-60°C, long.	13	$10^{-5} \text{ K}^{-1}$	DIN EN ISO 11359-1,2
Thermal expansion (CLTE)	23-100°C, long.	14	$10^{-5} \text{ K}^{-1}$	DIN EN ISO 11359-1,2
Specific heat		1.4	$\text{J/(g}^{\circ}\text{K)}$	ISO 22007-4:2008
Thermal conductivity		0.39	$\text{W/(K}^{\circ}\text{m)}$	ISO 22007-4:2008
<b>Electrical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>
surface resistivity	Silver electrode, 23°C, 12% <i>u.b.</i>	$10^{14}$	$\Omega$	DIN IEC 60093
volume resistivity	Silver electrode, 23°C, 12% <i>u.b.</i>	$10^{13}$	$\Omega^{\circ}\text{cm}$	DIN IEC 60093
Dielectric strength	23°C, 50% <i>u.b.</i>	49	$\text{kV/mm}$	ISO 60243-1
Resistance to tracking (CTI)	Platin electrode, 23°C, 50% <i>u.b.</i> , solvent A	600	V	DIN EN 60112
<b>Other properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>
Water absorption	24h / 96h (23°C)	0.05 / 0.1	%	DIN EN ISO 62
Resistance to hot water/ bases		(+)		-
Resistance to weathering		-		-
Flammability (UL94)	corresponding to	HB		DIN IEC 60695-11-10;