



## POM- C

### Chemical Designation

POM-C [Polyacetal (Copolymer)]

### Colour

white black

### Density

1.41 g/cm<sup>3</sup>

### Main features

- good wear properties
- low water absorption
- good chemical resistance
- easy to machine
- high dimensional stability

### Target Industries

- construction industry
- agricultural machinery
- automotive industry
- packaging and paper machinery
- process engineering

<b>Mechanical properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>
Modulus of elasticity (tensile test)	@ 73 °F	380,000	psi	ASTM D 638
Tensile strength at yield	@ 73 °F	8,800	psi	ASTM D 638
Tensile strength at break	@ 73 °F	9,700	psi	ASTM D 638
Elongation at yield	@ 73 °F	9	%	ASTM D 638
Elongation at break	@ 73 °F	25	%	ASTM D 638
Flexural strength	@ 73 °F	11,000	psi	ASTM D 790
Modulus of elasticity (flexural test)	@ 73 °F	360,000	psi	ASTM D 790
Compression strength		4,500	psi	ASTM D 695
Compression modulus	@ 73°F	334,000	psi	ASTM D 695
Impact strength (Izod)	@ 73 °F	1.0	ft-lbs/in	-
Rockwell hardness	@ 73 °F M Scale	86	%	ASTM D 785
Coefficient of friction	Dynamic 40 psi, 50 fpm	.21		ASTM D 3702
Wear rate	40 psi, 50 fpm	65 x 10 <sup>-10</sup>	in <sup>3</sup> -min/ft-lbs-hr	ASTM D 3702
<b>Thermal properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>
Melting temperature		329	°F	-
Deflection temperature	@ 66 psi	316	°F	ASTM D 648
Deflection temperature	@264 psi	230	°F	ASTM D 648
Service temperature	Intermittent	285	°F	-
Service temperature	Long Term	195	°F	-
Thermal expansion (CLTE)		4.7*10 <sup>-5</sup>	in/in/°F	ASTM D 696
<b>Electrical properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>
Volume resistivity		1.0 x 10 <sup>14</sup>	Ω*cm	ASTM D 257
Dielectric strength		500	V/mil	ASTM D 149
Dissipation factor	@ 60 Hz, 73 °F	.001	%	ASTM D 150
Dielectric constant	@ 60 Hz, 73 °F, 50% RH	3.7	%	ASTM D 150
<b>Other properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>
Moisture absorption	@ 24 hrs, 73 °F	.22	%	ASTM D 570
Moisture absorption	@ saturation, 73 °F	.80	%	ASTM D 570
Flammability (UL94)	UL 94	HB	%	-

■ NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets.

All values at 73°F (23°C) unless otherwise noted.

