


POM C

Acetal Copolymer

The copolymer grade is the ideal combination of strength, stiffness and wears resistance. It absorbs very little moisture, is easily machinable and is genuinely porosity-free making it the preferred grade for food contact and medical applications. The product exhibits an elevated resistance to hydrolysis, strong alkalis and thermal-oxidative degradation when compared to acetal homopolymer.

PROPERTY	TEST METHOD	NOTES	METRIC UNITS	IMPERIAL UNITS
GENERAL				
Colour				White/Black/Blue
Density	ISO 1183:1987	Test Method A	g/cm ³	1.410
Moisture Absorption (Equilibrium)	ISO 62:1999	50% RH, 23C	%	0.1
Water Absorption (24 Hours)	ISO 62:1999 (modified)	Immersion, 23C	%	0.20
Water Absorption (Saturation)	ISO 62:1999	Immersion, 23C	%	0.90
MECHANICAL				
Tensile strength	ISO 527-1/2:1993	Sample Type 1B, 50mm min ⁻¹	MPa	70
E-modulus	ISO 527-1/2:1993	Sample Type 1B, 50mm min ⁻¹	MPa	3100
Elongation at break	ISO 527-1/2:1993	Sample Type 1B, 50mm min ⁻¹	%	>15
Compressive Strength	ISO 604:2002	Sample Type B, 5mm min ⁻¹	MPa	110
Compressive Modulus	ISO 604:2002	Sample Type A, 1mm min ⁻¹	MPa	2600
Flexural Strength*	ISO 178:2001	1.5mm min ⁻¹	MPa	80
Flexural Modulus	ISO 178:2001	1.5mm min ⁻¹	MPa	2600
Izod Impact Strength	ISO 180:2000	Sample Type A (Notched)	KJ/m ²	7.20
Charpy Impact Strength	ISO 179-2:1999	Notched	KJ/m ²	-
Hardness (Shore D)	ISO 868:2003		-	83
Coefficient of Friction (Dynamic)		31.4m/min, 1.75MPa	-	0.25
Limiting PV			MPa/m.min	6
Wear Rate		31.4m/min, 1.75MPa	mg/km	-
K-Factor		31.4m/min, 1.75MPa	mm ³ /Nm	-
THERMAL				
Melting Temperature	-		°C	170
Glass Transition Temperature (Tg)	ISO 11359-2:1999		°C	-60
Heat Deflection Temperature HDT/A	ISO 75	1.80MPa	°C	110
Heat Deflection Temperature HDT/B	ISO 75	0.45MPa	°C	160
Maximum Intermittent Service Temperature	-		°C	140
Maximum Continuous Service Temperature	-	5000hrs	°C	90
Minimum Intermittent Service Temperature	-		°C	-
Minimum Continuous Service Temperature	-		°C	-
Coefficient of Linear Thermal Expansion (TMA)	ISO 11359-2:1999	23°C - 55°C	°C ⁻¹	9.2 x 10 ⁻⁵
Thermal Conductivity	ISO 8301:1991	Mean T = 20°C	W/m.°C	0.31
Flammability	IEC 60695-11-10:2003-08		-	HB
ELECTRICAL				
Dielectric Constant	IEC 60250:1969-01	1MHz	-	3.8
Dielectric Constant (Low Frequency)		100Hz	-	-
Dissipation Factor	IEC 60250:1969-01	100 Hz	Hz	0.005
Dielectric Strength	IEC 60243-1:1998-01		kV/mm	16.5
Volume Resistivity	IEC 60093:1980-01		ohm.m	1 x 10 ¹³
Surface Resistivity ROA	IEC 60093:1980-01		ohm	1 x 10 ¹³
Comparative Tracking Index	IEC 60112:2003-01		CTI	600
AVAILABILITY				
ROD: 5mm - 300mm DIA		All information contained in this literature corresponds with our current knowledge of the products. Global EPP assume no liability whatsoever in respect of application, conversion or use made of the aforementioned information or products, or any consequence thereof. The buyer undertakes all liability in respect of the application, conversion or use of the aforementioned information or products. Existing intellectual property rights must be observed and Global EPP reserve the right to make technical alterations.		
PLATE: 6mm - 100mm THICK	