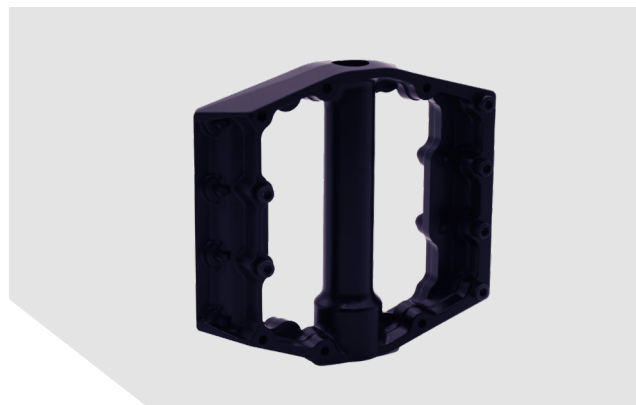


CNC MILLING

ACETAL COPOLYMER POM-C & RPOM-C 100%



PRODUCT DESCRIPTION:

This type of POM is a general purpose copolymer with high mechanical strength and rigidity. It comes with excellent machinability capabilities, good sliding characteristics and excellent wear resistance, as well as low moisture absorption. It comes in black colour and in two versions:

- POM-C FDA (only raw material)
- rPOM-C 100% recycled content

APPLICATIONS

POM-C and rPOM-C with 100% recycled content can both be used in a wide variety of industrial applications requiring strength, toughness and dimensional stability. They provide good resistance to wear, hot water, hydrocarbons and solvents making them suitable also for wet environments thanks to their low absorption. Typical applications are: bushings, rollers, wear strips, gears, pump parts and fittings.



KEY PRODUCT BENEFITS

- Available in two versions: virgin and with 100% recycled content
- High mechanical strength and rigidity
- High resistance to wear, hydrocarbons, water and solvents

Mechanical Properties	Test Method	Value POM-C	rPOM-C 100%
Colour	-	Black	Black
Density	ISO 1183-1	1,41g/cm ³	1,41g/cm ³
Modulus of elasticity	ISO 527-1/-2	2800 MPa	3000MPa
Tensile strength at yield	ISO 527-1/-2	20%	15%
Tensile strength at break	ISO 527-1/-2	50%	40%
Water absorption after 24h immersion in water of 23 °C (73°F)	ISO 62	0.24%	0.24%

Thermal Properties	Test Method	Value	Value
Melting temperature	ISO 11357-1/-3	165°C	165°C
Service temperature long term		100°C	100°C
Thermal conductivity at 23°C (73°F)		0.31 W/(K*m)	0.31 W/(K*m)
Flammability (UL94)	UL 94	HB	HB

Electrical Properties	Test Method	Value	Value
Electric strength	IEC 60243-1 (15)	20KV/mm	20KV/mm
Volume resistivity	IEC 62631-3-1	10E13 Ohm.cm	10E13 Ohm.cm
Surface resistivity	ANSI/ESD STM 11.11	10E12 Ohm/sq	10E12 Ohm/sq

Please note that this table, mainly to be used for comparison purposes, is a valuable help in the choice of a material. The data listed here fall within the normal range of product properties of dry material and come from our suppliers data sheets. However, they are not guaranteed and they should not be used to establish material specification limits nor used alone as the basis of design.

TOLERANCES

Typically, Protolabs can maintain a machining tolerance of +/- 0.1 mm.