POM Ertacetal C tube black

Universal material for precision parts and has low moisture absorption

ISO	POM polyoxymethylene; polyacetal; polyformaldehyde
Shape	shape_65
Color	Black
Temperature Range	-50 and 100 °C
tbl_temp_melting	165 °C
Density	1410 kg/m3
Hardness	84 Rockwell M
Elongation at break	40 %
Tensile strength	66 N/mm2

Material information

Very high dimensional stability so suitable for precision parts High mechanical strength, stiffness and hardness. Very high resilience. High impact resistance at lower temperatures. Absorbs less moisture than, for example, Nylon Good sliding properties and wear resistance This is an unfilled polyacetal copolymer type. The copolymer has good resistance to hydrolysis, strong bases and thermo-oxidative degradation.

Usage examples

Manufactures precision mechanical parts and is used for such things as gears and rudder bearings.

Processing

Excellent machinability on (automatic) lathes
Measurement tolerance 2768-mK

Petrol	Water	Wear resistance
Moderate	Good	Moderate

Item Overview

Item Code	Item Name	Width (mm)	Length (mm)
72501050	POM Ertacetal C zwart buis 100x50 mm		
72501080	POM Ertacetal C zwart buis 100x80 mm		
72503215	POM Ertacetal C zwart buis 32x15 mm		
72506030	POM Ertacetal C zwart buis 60x30 mm		
72506040	POM Ertacetal C zwart buis 60x40 mm		

Water absorption

The extent to which the product absorbs water when tested for 24 hours in water at 23 degrees in accordance with ISO 63.

Immersion	Saturation
0,240 %	0,800 %

Thermal properties

tbl_thermal_explainer

tbl_thermische_geleiding	tbl_lin_uitzet_2360	tbl_lin_uitzet_23100	tbl_temp_deflection_load
0,310 W/(K.m)	110 x 10-6 m/(m.K)	125 x 10-6 m/(m.K)	100 °C

Mechanical properties

tbl_mechanical_explainer

tbl_tension_norm	tbl_tension_stress_yield	tbl_tension_strain_yield	tbl_tension_strain_break	tbl_modulus_elasticity
ISO 527-1/-2	66 MPa	15 %	40 %	3.000 MPa

Impact tests

tbl_charpy_izod_explainer

tbl_charpy_impact	tbl_charpy_unnotched	tbl_charpy_notched	tbl_izod_impact	tbl_izod_impact_notched
ISO 179-1	KJ/m^2	8 KJ/m^2	ISO 179-1	0

Dynamische Coeffient of Friction

tbl_dcf_explainer

tbl_dcf	tbl_dcf_min	tbl_dcf_max	tbl_dcf_wear
ISO 179-1	0,300	0,450	45 µm/km

Electrical properties

Tests related to the electrical resistivity and conductivity of the material.

Electric strength		Volume resistance		Surface resistance	
IEC 60243-1	20 kV/mm	IEC 60093	>10E 14 Ohm.cm	IEC 60093	>10E 13 Ohm/sq.

Related materials

Code	Group Name	Shape	Color
708	POM Ertacetal C blauw staf	Rod	color_bla50
725	POM Ertacetal C buis zwart	shape_65	Black
607	POM Ertacetal C naturel	Sheet	color_nat
680	POM Ertacetal C naturel staf	Rod	color_nat
608	POM Ertacetal C zwart	Sheet	Black
681	POM Ertacetal C zwart staf	Rod	Black

specification.