

Universal food grade blue material for precision parts with low moisture absorption

ISO	POM polyoxymethylene; polyacetal; polyformaldehyde
Shape	Rod
Color	color_bla50
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
Flame Resistance (UL 94)	HB

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



FDA

European Food Grade according to EC 1935:2004 USA Food Grade under FDA

Item Overview

Item Code	Item Name	Width (mm)	Length (mm)
70800200	POM Ertacetal C blauw staf 20 mm		1.000
70800300	POM Ertacetal C blauw staf 30 mm		1.000
70800400	POM Ertacetal C blauw staf 40 mm		1.000
70800450	POM Ertacetal C blauw staf 45 mm		1.000
70800500	POM Ertacetal C blauw staf 50 mm		1.000
70800600	POM Ertacetal C blauw staf 60 mm		1.000
70800700	POM Ertacetal C blauw staf 70 mm		1.000
70800800	POM Ertacetal C blauw staf 80 mm		1.000
70800900	POM Ertacetal C blauw staf 90 mm		1.000



70801000	POM Ertacetal C blauw staf 100 mm	1.000
70801300	POM Ertacetal C blauw staf 130 mm	1.000
70801500	POM Ertacetal C blauw staf 150 mm	1.000
70801600	POM Ertacetal C blauw staf 160 mm	1.000
70801800	POM Ertacetal C blauw staf 180 mm	1.000
70802000	POM Ertacetal C blauw staf 200 mm	1.000
70802200	POM Ertacetal C blauw staf 220 mm	1.000

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/m² 8 KJ/m² ISO 179-1 0

Dynamische Coefficient 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 13 Ohm.cm IEC 60093 >10E 12 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

We provide product information as known by us with great care. We cannot accept any liability for errors and/or inaccuracies and/or incompleteness. Please note that our products are intended for professional use only. For high impact applications and/or combinations of limit values we always recommend to have the properties specific to that situation verified by us. If there are multiple specifications for a product we will use the standard of 2mm or the closest specification.

