

DATA SHEET

POM ROUND ROD FOOD -SAFE

Food compliant:

- ✓ food grade
- ✓ EU Regulation 1935/2004
- ✓ EU Regulation 10/2011

Customised sizes

Material:
POM



ORDER NO.	TYPE	COLOUR	RAL	Ø	LENGTH
4061408118168	496020B1000	● blue	5002	20	1000
4061408115587	496030B1000	● blue	5002	30	1000
4061408121519	496040B1000	● blue	5002	40	1000
4061408118144	496020G1000	● grün	6016	20	1000
4061408115570	496030G1000	● grün	6016	30	1000
4061408120109	496040G1000	● grün	6016	40	1000
4061408115600	496030N1000	● natur	-	30	1000
4061408120116	496020R1000	● rot	3027	20	1000
4061408115594	496030R1000	● rot	3027	30	1000
4061408119714	496040R1000	● rot	3027	40	1000
4061408118151	496020S1000	● orange	2009	20	1000
4061408115563	496030S1000	● orange	2009	30	1000
4061408119707	496040S1000	● orange	2009	40	1000
4061408118380	496020Y1000	● gelb	1016	20	1000
4061408088553	496030Y1000	● gelb	1016	30	1000
4061408121076	496040Y1000	● gelb	1016	40	1000

FURTHER DIMENSIONS IN OUR SHOP: WWW.MOVET.DE

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GENERAL PROPERTIES

	VALUE	NORM
Density	1,41 g/cm ³	ISO 1183
Water absorption in air 50% r.h.	0,2 %	ISO 62
Absorption 23-C in water-saturation	0,65 %	ISO 62

MECHANICAL PROPERTIES

	VALUE	NORM
Tensile stress at yield at break	66 N/mm ²	ISO 527
Elongation at break	31 (60) %	ISO 527
Tensile Modulus	2800 N/mm ²	ISO 527
Elongation at break	10 %	ISO 527
Elongation at yield	33 %	ISO 527
Flexural strength	90 N/mm ²	ISO 178
Compression strength (1%)	20 N/mm ²	ISO 604
Impact strength Charpy 7,5 J	no break	ISO 179
Notched impact strength Charpy	7 KJ/ mm ²	ISO 179/3C
Ball indentation hardness	125 N/mm ²	ISO 2039.1
Rockwell hardness (dry)	M88	ISO 2039.2
Coefficient of friction to steel [12]	0,35	ISO 8295

THERMAL PROPERTIES

	VALUE	NORM
Melting point	165 °C	ISO 3146
Thermal conductivity	0,3 W/(km)	ISO 22007.2
Heat deflection temperature HDT ^[15]	95 °C	ISO75
Linear expansion coefficient 23-60°	120 x 10 ⁻⁶ K ⁻¹	ISO 11359
Operating temperature continuously ^[17]	100 °C	
Operating temperature short period-no load ^[18]	140 °C	
Minimum operating temperature ^[19]	-50 °C	
Flammability UL 94 (3-6 mm thickness) Oxygen index (LOI)	HB 15 %	ISO4589

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<u>ELECTRICAL PROPERTIES</u>	VALUE	NORM
Dielectric constant at 1 MHz.	3,8	ISO 250
Dielectric strength	40 KV/mm	ISO 243
Volume resistivity	$10^{15} \Omega \text{cm}$	ISO 93
Dissipation factor $\tan \Delta$ at 1MHz	0,005	ISO 250

N.B.

- Figures relate to specimen conditioned at 23°C and 50% RH. Figures between brackets relate to dry specimen. Figures for materials marked with * can change according to their moisture content.
- Figures refer to un-coloured specimen either injection moulded or machined in the easiest way. Tests made on specimen of different sizes give slightly different results.
- [12] Test on ground steel dry specimen load =0,05 N/mm² speed=0,6 m/s.
- [15] Deformation at temperature. HDT at 1,8 N/mm²
- [17] Operating temperature continuously 5000h From 23°C upwards the materials' features change in a non-uniform and disproportional way due to the heat. The quoted limits are indicative and based on a tensile stress of 50% of the value at 23° C.
- [18] Operating temperature short period (no load)
- [19] The mechanical features decrease with a reduction in temperature and are influenced also by other factors (moisture, etc.). The quoted value does not take into consideration impact conditions or heavy loads.
- A Amorphous
- All values and information provided are based on information currently in our possession and/or results archived from tests conducted in laboratories. They are given in good faith and are not legally binding. For any particular application, our technical staff is at your disposal to assist with solving your problem.