

Application purpose and characteristics

Mechanical engineering, electrical and electronic industries, food industry

High chemical resistance, high dimensional stability, low moisture absorption, suitable for direct food contact

Material name, short description	POM-C
Material name, based on technical standards	Polyoxymethylene copolymer
Density	1.41 g/cm ³
Color	natural
Compound code	POM-C 00.001-00

Mechanical properties

Modulus of elasticity & tension 1	2800 N/mm ² DIN EN ISO 527
Yield stress	67 N/mm ² DIN EN ISO 527
Elongation at rupture	30 % DIN EN ISO 527
Hardness test value	81 Shore D
Ball indentation hardness	150 N/mm ² DIN EN ISO 2039-1
Notch impact strength	6.00 kJ/m ² DIN EN ISO 179

Electrical attributes

Comparative tracking index	600 IEC 60112
Dielectric dissipation factor 1	0.002 IEC 60250 50 Hz
Dielectric constant 1	3.8 IEC 60250
Dielectric strength 1	40 kV/mm IEC 60243
Surface resistivity	10 ¹³ Ω IEC 60093
Volume resistivity	10 ¹³ Ω*cm IEC 60093

Thermal attributes

Min. operating temperature	-50 °C
Max. operating temperature long term	100 °C
Max. operating temperature short term	140 °C
Coefficient of linear thermal expansion 1	110 * 10 ⁻⁶ K ⁻¹ DIN 53752
Crystalline melting point	165 °C ISO 11357-3
Heat deflection temperature 1	110 °C DIN EN ISO 75 / A
Specific heat capacity	1.5 J/(g·K) DIN 52612
Thermal conductivity	0.31 W/(m·K) DIN 52612-1

Other attributes

Water absorption	0.2 % DIN EN ISO 62
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In compliance with RoHS and REACH directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.