

Application purpose and characteristics

Mechanical Engineering Industry
Oil and Gas
Conveyor Technology & Automation
Electronics
Vehicle Construction
Agriculture Industry
Renewable Energies
Sustainable Plastic
Chemical resistant
Low moisture absorption
High abrasion resistance
High tensile strength
High stiffness
Good impact strength
Low creep tendency
Good machinability
Good electrical properties
Good dielectric properties
Good dimensional stability
Good sliding properties

Material name, short description	POM-C
Material name, based on technical standards	Polyoxymethylene copolymer
Density	1.41 g/cm ³
Color	black
Compound code	POM-C PIR.001-01
Remarks	Post-Industrial-Recycling material, content 100%. -80% CO ₂ emissions compared to standard POM-C

Mechanical properties

Modulus of elasticity & tension 1	2700 N/mm ² DIN EN ISO 527
Yield stress	65 N/mm ² DIN EN ISO 527
Elongation at break	30 % DIN EN ISO 527
Hardness nominal value	80 Shore D DIN EN ISO 868
Notch impact strength	6.00 kJ/m ² DIN EN ISO 179

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 DIN 53752
Crystalline melting point	165 °C ISO 11357-3
Heat deflection temperature 1	110 °C DIN EN ISO 75 / A Verf. A, HDT
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 EU REACH regulation and EU ROHS directives. The information about compliance are intended to provide guidance on the use of our material. The document does not replace a declaration of conformity and does not relieve the user to require information on specific approval. 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.

Electrical attributes

Comparative tracking index	600 IEC 60112
Dielectric dissipation factor 1	0.002 IEC 60250 50 Hz
Dielectric constant 1	4 DIN IEC 60250
Dielectric strength 1	40 kV/mm IEC 60243
Surface resistivity	10 ¹³ Ω DIN EN 62631-3-2
Volume resistivity	10 ¹³ Ω*cm DIN EN 62631-3-1

Approvals / Compliance

Flammability	UL 94 HB / HB
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