APSOplast® POM-C

Angst+Pfister

Engineering plastics technology
Technical Data Sheet

Application purpose and characteristics
Mechanical engineering, conveyor technologiy, precision engineering, automotive industry, food engineering, electrical engineering, home appliances, medical technology
High strength, resistent to cleaning agents, stiff, high toughness, very good electrical insulation, good machinability, good slide and wear properties, difficult to bond

Material name, short description	POM-C
Material name, based on technical standards	Polyoxymethylene copolymer
Density	1.41 g/cm³
Color	natural (white)
Compound code	POM-C 00.002-00

Mechanical properties

Modulus of elasticity & tension 1	2800 N/mm² DIN EN ISO 527-2 1 mm/min
Tensile strength	67 N/mm² DIN EN ISO 527-2 50 mm/min
Yield stress	67 N/mm² DIN EN ISO 527-2 50 mm/min
Elongation at break	32 % DIN EN ISO 527-2 50 mm/min
Elongation at yield	9 % DIN EN ISO 527-2 50 mm/min
Flexural modulus of elasticity	2600 N/mm² DIN EN ISO 178 2 mm/min, 10 N
Modulus of pressure	2300 N/mm² 2 mm/min, 10 N
Bending strength 1	91 N/mm² DIN EN ISO 178 2 mm/min, 10 N
Compressive strength 1	20 N/mm² EN ISO 604 at 1% deformation (5 mm/min, 10 N)
Compressive strength 2	35 N/mm² EN ISO 604 at 2% deformation (5 mm/min, 10 N)
Ball indentation hardness	165 N/mm² ISO 2039-1
Impact strength	no break DIN EN ISO 179-1eU (Charpy) max 7.5 J
Notch impact strength	8.00 kJ/m² DIN EN ISO 179-1eA (Charpy) max 7.5 J

Thermal attributes

Max. operating temperature long term	100 °C
Max. operating temperature short term	140 °C
Coefficient of linear thermal expansion 1	13 * 10⁻⁵ K⁻¹ DIN EN ISO 11359-1,-2 (CLTE) 23-60 °C, longitudinal
Coefficient of linear thermal expansion 2	14 10^5 K-1 DIN EN ISO 11359-1,-2 23-100 °C, longitudinal
Crystalline melting point	166 °C DIN 53765
Glass transition temperature	-60 °C DIN 53765
Specific heat capacity	1.4 J/(g·K) ISO 22007-4 2008
Thermal conductivity	0.39 W/(m·K) ISO 22007-4 2008

Electrical attributes

Comparative tracking index	600 DIN EN 60112 Platinum electrode, 23 °C, 50 % rel. LF, solution A
Dielectric strength 1	49 kV/mm ISO 60243-1 23 °C, 50 % rel. LF
Surface resistivity	10¹⁴ Ω DIN IEC 60093 Silver electrode, 23 °C, 12 % rel. LF

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.

Other attributes

Water absorption	0.05 % DIN EN ISO 62 24h (23°C)
Water absorption 2	0.1 % DIN EN ISO 62 96h (23°C)

Approvals / Compliance

Food & Beverage	FDA CFR 21 - 177.2470 "Polyoxymethylene copolymer"
	EC No. 1935/2004 incl. last amendments ....
	Regulation EU 10/2011
Specific substance statements	ADI free (free of Animal Derived Ingredients) resp. TSE/BSE related substances

ADI ANIMAL DERIVED INGREDIENT free

EC No.1935:2004

FDA

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