

Technical data KEBAFORM C 90.0

POM copolymer unreinforced, medium viscosity for injection molding

Polymer: POM

ISO designation: POM-C

Productgroup: POM

Brief description of the product family:

Under the trade name KEBAFORM, we market a wide product range of POM copolymers. KEBAFORM products are characterized by high strength and surface hardness, excellent chemical resistance and outstanding sliding and wear behavior. The product range includes basic grades with different viscosities, sliding and wear-optimized grades, variants reinforced with glass and carbon fibers, and various other modified compounds.

Properties:

dimensionally stable, good chemical resistance, good spring properties, good gliding properties, High strength, High wear resistance, semi-crystalline, approved for food contact (EU and FDA)

Typical areas of application:

Connecting elements, Distributor, Fittings, Gears, Controls, Fasteners, Cover, Spring elements, Pipe fitting, Housing, Sliding elements, Plain bearing, Piston, Cables and connectors for media-carrying systems, media-carrying components, Rollers, Valves

Industries:

Automotive, Household appliances, Mechanical Engineering, Sanitary industry

Physical properties

Moisture absorption 23°C/50% r.h. in %. in Anlehnung an ISO 62	0.22
Density in kg/m ³ ISO 1183-1	1410.00

Mechanical properties

E-modulus in MPa ISO 527-1	2700
Yield stress in MPa ISO 527-1	64
Elongation at yield in % ISO 527-1	9.0
Impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eU	100.0
Impact strength (Charpy) at -30°C in kJ/m ² ISO 179-1eU	100.0
Notched impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eA	7.0
Notched impact strength (Charpy) at -30°C in kJ/m ² ISO 179-1eA	6.5

Rheological properties

Melt flow rate MFR (test condition)	190°C / 2,16kg
Melt flow rate MFR in g/10min ISO 1133	9.0

Rheological properties

Shrinkage in flow direction in % ISO 294-4	2.00
Shrinkage transverse to the flow direction in % ISO 294-4	2.00

Thermal properties

Melting temperature (DSC, 10°C/min) in °C ISO 11357-1/-3	166.0
Heat deflection temperature HDT (1.80 MPa) in °C ISO 75-1/-2	110.0
Heat deflection temperature HDT (0.45 MPa) in °C ISO 75-1/-2	160.0
Coefficient of thermal expansion in flow direction in E-6/K ISO 11359-1/-2	120.0
Coefficient of thermal expansion transverse to the flow direction in E-6/K ISO 11359-1/-2	120.0
Fire behavior (0.8 mm wall thickness) IEC 60695-11-10	HB
UL listing	ja

Electrical properties

Contact resistance in Ohm*m IEC 60093	1e+11
Surface resistivity in ohms IEC 60093	1e+14

Electrical properties	
Dielectric strength in kV/mm IEC 60243-1	35
Tracking resistance CTI in V IEC 60112	600

Processing instructions:

Pre-drying:

(May be required to remove surface moisture).

Dryer type: Dry air dryer

Temperature: 80 – 100°C

Drying time: 2 – 4 h

Temperatures:

Melt temperature: 180 – 210°C

Mold temperature: 60 – 120°C (general guideline for technical parts: min. 90°C)

Back pressure (spec.): 10 – 40 bar

Injection speed: medium

Injection pressure: 600 – 1200 bar (depending on part and gate geometry)

Holding pressure: 600 – 1200 bar (depending on part and gate geometry)

General processing instructions:

The residence time of the melt in the screw antechamber should be kept as short as possible. In case of longer downtimes, an empty spraying of barrel and hot runner is necessary.

Legal notices:

The information in this data sheet is based on our current knowledge and experience. Due to the wide range of possible influences during processing and application of our products, they do not exempt the processor from carrying out his own tests and trials. A legally binding assurance of certain properties or suitability for a specific application cannot be derived from our information.

* FE products are development products which are still in the trial phase. Technical data may still change in the course of product and process development. No final decision has yet been made on the commercialization of FE products. We reserve the right to discontinue the manufacture of FE products without giving further reasons.

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