

Technical data

KEBAFORM C 25 H

KEBAFORM C 25 H is a new type of POM that has been specially developed for sliding and wear applications. Compared to a standard POM copolymer, the material is characterized by a higher crystalline structure and thus better wear properties and a higher melting temperature. The improvement in the sliding and wear behavior of KEBAFORM C 25 H is achieved solely by modifying the polymer chain and thus there is no reduction in the mechanical properties due to the addition of tribologically effective additives. Due to its property profile, KEBAFORM C 25 H is particularly well suited for applications that require good sliding and wear behavior but do not allow any compromises in mechanical properties, e.g. for gears, rollers, plain bearings, guide bushes, etc.

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 gliding properties, good recovery behavior, High wear resistance, semi-crystalline

Typical areas of application:

Industries:

Physical properties

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| Moisture absorption 23°C/50% r.h. in %. in Anlehnung an ISO 62 | 0.20 |
| Density in kg/m ³ ISO 1183-1 | 1410.00 |

Mechanical properties

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|---|-------|
| E-modulus in MPa ISO 527-1 | 2600 |
| Yield stress in MPa ISO 527-1 | 65 |
| Elongation at yield in % ISO 527-1 | 11.0 |
| Impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eU | 100.0 |
| Notched impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eA | 9.0 |

Rheological properties

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|---|--------------------|
| Melt flow rate MFR (test condition) | 190°C / 2,16 kg |
| Melt flow rate MFR in g/10min ISO 1133 | 2.5 |
| Shrinkage in flow direction in % ISO 294-4 | 2.10 |
| Shrinkage transverse to the flow direction in % ISO 294-4 | 2.00 |

Thermal properties

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| Melting temperature (DSC, 10°C/min) in °C ISO 11357-1/-3 | 178.0 |
| Fire behavior (0.4 mm wall thickness) IEC 60695-11-10 | HB |
| Fire behavior (0.8 mm wall thickness) IEC 60695-11-10 | HB |
| Fire behavior (1.6 mm wall thickness) IEC 60695-11-10 | HB |
| Fire behavior (3.2 mm wall thickness) IEC 60695-11-10 | HB |

Electrical properties

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| Tracking resistance CTI in V IEC 60112 | 600 |
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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 component and gate geometry)

General processing instructions:

The residence time of the melt in the screw antechamber should be kept as short as possible. In the event of longer downtimes, the barrel and hot runner must be sprayed empty.

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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