

**VESTAKEEP® 4000 FP**  
**PEEK**

Evonik Operations GmbH

**Unreinforced, high-viscosity polyether ether ketone fine powder**

**VESTAKEEP® 4000 FP** is an unreinforced, highviscosity polyether ether ketone fine powder. It can be used as a basic resin or in blends with different additives for manufacturing compression molding parts.

The semi-crystalline polymer features superior thermal and chemical resistance. VESTAKEEP® 4000 FP is of low flammability.

VESTAKEEP® 4000 FP is supplied as powder in boxes with moisture-proof polyethyleneliners.

Inside the original and undamaged packaging, the product has a shelf life of at least 2 years when stored in dry rooms at temperatures not exceeding 30 °C.

Pigmentation may affect values.

For guidance processing of VESTAKEEP® 4000 FP please follow the general recommendations in our brochure "VESTAKEEP® High Performance in Powder Form Polyether Ether Ketone Powders".

The values presented are typical or average values, they do not constitute a specification.

FOR FURTHER INFORMATION PLEASE CONTACT US AT [EVONIK-HP@EVONIK.COM](mailto:EVONIK-HP@EVONIK.COM) OR VISIT OUR PRODUCT AT [WWW.INDUSTRIAL.VESTAKEEP.COM](http://WWW.INDUSTRIAL.VESTAKEEP.COM)

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	11	cm³/10min	ISO 1133
Temperature	380	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	3500	MPa	ISO 527
Yield stress	96	MPa	ISO 527
Yield strain	5	%	ISO 527
Nominal strain at break	30	%	ISO 527
Impact Strength (Charpy), +23 °C	no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30 °C	no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23 °C	7	kJ/m²	ISO 179/1eA
Type of failure	C	-	-
Notched Impact Strength (Charpy), -30 °C	6	kJ/m²	ISO 179/1eA
Type of failure	C	-	-

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting Temperature (10 °C/min)	340	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	150	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	205	°C	ISO 75-1/-2
Vicat softening temperature, 50 °C/h 50N	305	°C	ISO 306

Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density	1300	kg/m³	ISO 1183

**Characteristics**
**Processing**

Transfer Molding, Compression Molding

**Features**

Blending Resin

**Delivery form**

Powder

**Chemical Resistance**

General Chemical Resistance

## Disclaimer

### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

Any information given on the chemical and physical characteristics of our products, including, without limitation, technical advice on applications, whether verbally, in writing or by testing the product, is given to the best of our knowledge and in good faith and does not exempt the buyer from carrying out their own investigations and tests in order to ascertain the product's specific suitability for the purpose intended.

The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations. **NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO, SAFETY-CRITICAL COMPONENTS OR SYSTEMS.**

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**Important:** irrespective of product type or designation, ALBIS does not recommend or support the use of any products it supplies which fall into the following medical, pharmaceutical or diagnostic application categories:

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

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