

Product Information

**VESTAKEEP® 5000 P**

**UNREINFORCED, HIGH-VISCOSITY POLYETHER ETHER KETONE POWDER**



VESTAKEEP® 5000 P is an unreinforced, high-viscosity polyether ether ketone powder.

The semi-crystalline polymer features superior thermal and chemical resistance. VESTAKEEP® 5000 P is of low flammability.

VESTAKEEP® 5000 P is supplied as powder in boxes with moisture-proof polyethylene liners.

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 the values.

For information about processing of VESTAKEEP® 5000 P, 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)

**Key Features**

**Industrial Sector**

Automotive and Mobility, Aircraft and Aerospace, Energy, Oil and Gas

**Resistance to**

Heat (thermal stability), Fire / burn

**Processing**

Injection molding, Press and sintering, Coating

**Additives**

Unfilled

**Delivery form**

Powder

**Mechanical properties ISO**

	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Tensile modulus	<b>3500</b>	MPa	ISO 527
Tensile strength	<b>95</b>	MPa	ISO 527
Yield stress	<b>95</b>	MPa	ISO 527
Yield strain	<b>5</b>	%	ISO 527

Stress at break	<b>77</b>	MPa	ISO 527
Nominal strain at break, tB	<b>27</b>	%	ISO 527
Charpy notched impact strength, +23°C	<b>9</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Type of failure	<b>C</b>	-	-

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Melting temperature	<b>336</b>	°C	ISO 11357-1/-3
Glass transition temperature, 2 nd heating, midpoint	<b>152</b>	°C	ISO 11357
Melting Temperature	<b>336</b>	°C	ASTM D 3418

<b>Rheological properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Melt volume-flow rate, MVR	<b>7.6</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>380</b>	°C	-
Load	<b>5</b>	kg	-

<b>Test specimen production</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Injection Molding, melt temperature	<b>380</b>	°C	ISO 294
Injection Molding, mold temperature	<b>180</b>	°C	ISO 294
Injection Molding, injection velocity	<b>200</b>	mm/s	ISO 294

### Characteristics

#### Applications

Electrical and Electronical

#### Processing

Scatter coating

#### Special Characteristics

High viscosity

#### Chemical Resistance

General chemical resistance

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**Evonik Operations GmbH**  
**Smart Materials**  
**High Performance Polymers**  
45772 Marl / Germany  
Tel: +49 2365 49-9878  
[evonik-hp@evonik.com](mailto:evonik-hp@evonik.com)  
[www.plastics-database.com](http://www.plastics-database.com)