

Product Information

# VESTAKEEP® 2000 FP

## UNREINFORCED, MEDIUM-VISCOSITY POLYETHER ETHER KETONE FINE POWDER



**VESTAKEEP® 2000 FP** is an unreinforced, medium-viscosity 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® 2000 FP is of low flammability.

VESTAKEEP® 2000 FP is supplied as a 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 values.

For information about processing of VESTAKEEP® 2000 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)

### Key Features

**Industrial Sector**

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

**Processing**

Press and sintering, Coating

**Delivery form**

Powder

**Resistance to**

Heat (thermal stability), Fire / burn

**Conformity**

Food contact

**Additives**

Unfilled

**Mechanical properties ISO**

Tensile modulus

**Value**

**3700**

**Unit**

MPa

**Test Standard**

ISO 527

Tensile strength

**100**

MPa

ISO 527

Yield stress

**100**

MPa

ISO 527

Yield strain

**5**

%

ISO 527

Stress at break	<b>70</b>	MPa	ISO 527
Nominal strain at break, tB	<b>30</b>	%	ISO 527
Charpy impact strength, +23°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	<b>6</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Type of failure	<b>C</b>	-	-
Charpy notched impact strength, -30°C	<b>6</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>340</b>	°C	ISO 11357-1/-3
Temp. of deflection under load A, 1.80 MPa	<b>155</b>	°C	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	<b>205</b>	°C	ISO 75-1/-2
Vicat softening temperature A, 10 N, 50 K/h	<b>335</b>	°C	ISO 306
Vicat softening temperature B, 50 N, 50 K/h	<b>310</b>	°C	ISO 306
Melting Temperature	<b>340</b>	°C	ASTM D 3418

<b>Physical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1300</b>	kg/m <sup>3</sup>	ISO 1183
Moisture content	<b>0.14</b>	Gew.-%	ISO 15512
Density	<b>1300</b>	kg/m <sup>3</sup>	ASTM D 792

<b>Burning Behav.</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Burnin behav. at thickness h	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested	<b>3.2</b>	mm	-

<b>Rheological properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Melt volume-flow rate, MVR	<b>70</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>380</b>	°C	-

Load	5	kg	-
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Powder properties	Value	Unit	Test Standard
Bulk density, powder	280	g/l	EN ISO 60
Particle size, D(50)	50	µm	ISO 13320, DIN ISO 8130-13

**Characteristics**

**Applications**

Electrical and Electronical

**Color**

Natural color

**Special Characteristics**

Semi-crystalline, Medium viscosity

**Delivery form**

Fine powder (FP)

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