

**Product Texts**

**Carbon fiber-reinforced, medium viscosity polyether ether ketone**

**VESTAKEEP® 2000 CF30** is a medium-viscosity, carbon fiber-reinforced (30%) polyether ether ketone for injection molding.

The semi-crystalline polymer features superior, mechanical, thermal and chemical resistance. Parts made from VESTAKEEP® 2000 CF30 are of low flammability.

VESTAKEEP® 2000 CF30 can be processed by common injection machines for thermoplastics.

We recommend a melt temperature between 380°C and 400°C during the injection molding process. The mold temperature should be within a range of 160°C to 200°C, preferably 180°C.

VESTAKEEP® 2000 CF30 is supplied as granules in 25 kg 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 effect values.

For information about processing of VESTAKEEP® 2000 CF30, please follow the general recommendations in our brochure "VESTAKEEP® PEEK-Processing Guidelines".

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)

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	<b>19</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>400</b>	°C	-
Load	<b>5</b>	kg	-
<sup>[C]</sup> Molding shrinkage, parallel	<b>0</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.4</b>	%	ISO 294-4, 2577

[C]: CAMPUS

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>24000</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>251</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>1.85</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>51</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Type of failure	<b>C</b>	-	-
<sup>[C]</sup> Charpy impact strength, -30°C	<b>45</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Type of failure	<b>C</b>	-	-
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>8</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Type of failure	<b>C</b>	-	-
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>8</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Type of failure	<b>C</b>	-	-

[C]: CAMPUS

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>340</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	<b>146</b>	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>330</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>340</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	<b>340</b>	°C	ISO 306

[C] Coeff. of linear therm. expansion, parallel	<b>10</b>	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested	<b>1.6</b>	mm	-
Yellow Card available	<b>yes</b>	-	-
[C] Oxygen index	<b>47</b>	%	ISO 4589-1/-2

[C]: CAMPUS

<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
[C] Relative permittivity, 1MHz	<b>17</b>	-	IEC 62631-2-1
[C] Dissipation factor, 1MHz	<b>2300</b>	E-4	IEC 62631-2-1
[C] Volume resistivity	<b>10000</b>	Ohm*m	IEC 62631-3-1

[C]: CAMPUS

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
[C] Water absorption	<b>0.4</b>	%	Sim. to ISO 62
[C] Density	<b>1410</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

<b>Test specimen production</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
[C] 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
Injection Molding, pressure at hold	<b>120</b>	MPa	ISO 294

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa