

Product Texts

Carbon fiber-reinforced, high viscosity polyether ether ketone

VESTAKEEP® 4000 CFL30 is a carbon fiber reinforced polyether ether ketone for injection molding.

The semi-crystalline polymer features superior mechanical, thermal, and chemical resistance. Parts made from VESTAKEEP® 4000 CFL30 are characterized by low flammability.

VESTAKEEP® 4000 CFL30 can be processed by common injection molding 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® 4000 CFL30 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 affect values.

For information about processing VESTAKEEP® 4000 CFL30, 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 OR VISIT OUR PRODUCT AT WWW.INDUSTRIAL.VESTAKEEP.COM

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	24	cm³/10min	ISO 1133
Temperature	400	°C	-
Load	21.6	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	24000	MPa	ISO 527
^[C] Stress at break	245	MPa	ISO 527
^[C] Strain at break	2	%	ISO 527
^[C] Charpy notched impact strength, +23°C	11	kJ/m²	ISO 179/1eA
^[C] Type of failure	C	-	-

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1400	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	420	°C	ISO 294
Injection Molding, mold temperature	200	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Delivery form

Granules

Features

Thermal Stability

Chemical Resistance

General Chemical Resistance

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