

Product Information

VESTAKEEP® 5000 CF30

CARBON FIBER-REINFORCED (30%) POLYETHER ETHER KETONE



VESTAKEEP® 5000 CF30 is a carbon fiberreinforced (30%) polyether ether ketone for injection molding.

The semi-crystalline polymer features superior mechanical, thermal, and chemical resistance. Parts made from VESTAKEEP® 5000 CF30 are of low flammability.

VESTAKEEP® 5000 CF30 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® 5000 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 affect values.

The results shown have been generated from a low number of production lots. Therefore, they are preliminary and not yet the result of a statistical evaluation. Therefore they must not be used to establish specifications.

For information about processing VESTAKEEP® 5000 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 OR VISIT OUR PRODUCT AT WWW.INDUSTRIAL.VESTAKEEP.COM

Key Features

Industrial Sector

Industry and Engineering

Processing

Injection molding

Delivery form

Pellets, Granules

Resistance to

Heat (thermal stability), Fire / burn

Additives

Carbon fibers

Mechanical properties ISO	Value	Unit	Test Standard
Tensile modulus	23000	MPa	ISO 527
Stress at break	240	MPa	ISO 527
Strain at break, B	2	%	ISO 527
Charpy impact strength, +23°C	60	kJ/m ²	ISO 179/1eU
Type of failure	C	-	-
Charpy notched impact strength, +23°C	12	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-

Thermal properties	Value	Unit	Test Standard
Melting temperature	340	°C	ISO 11357-1/-3
Melting Temperature	340	°C	ASTM D 3418

Physical properties	Value	Unit	Test Standard
Density	1400	kg/m ³	ISO 1183
Density	1400	kg/m ³	ASTM D 792

Rheological properties	Value	Unit	Test Standard
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	400	°C	-
Load	21.6	kg	-

Characteristics

Special Characteristics

Semi-crystalline, High viscosity

Additives

External lubrication

Chemical Resistance

General chemical resistance

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