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.

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	dry	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/m²	ISO 179/1eU
Type of failure	**C**	-	-
Charpy notched impact strength, +23°C	**12**	kJ/m²	ISO 179/1eA
Type of failure	**C**	-	-

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

Physical properties	dry	Unit	Test Standard
Density	**1400**	kg/m³	ISO 1183
Density	**1400**	kg/m³	ASTM D 792

Rheological properties	dry	Unit	Test Standard
Melt volume-flow rate, MVR	**14**	cm³/10min	ISO 1133
Temperature	**400**	°C	-
Load	**21.6**	kg	-

Characteristics

Special Characteristics
Semi-crystalline, High viscosity

Chemical Resistance
General chemical resistance