

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".

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

	dry	Unit	Test Standard
Tensile modulus	3700	MPa	ISO 527
Tensile strength	100	MPa	ISO 527
Yield stress	100	MPa	ISO 527

Yield strain	5	%	ISO 527
Stress at break	70	MPa	ISO 527
Nominal strain at break, tB	30	%	ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-
Charpy notched impact strength, -30°C	6	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-

Thermal properties	dry	Unit	Test Standard
Melting temperature	340	°C	ISO 11357-1/-3
Temp. of deflection under load A, 1.80 MPa	155	°C	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	205	°C	ISO 75-1/-2
Vicat softening temperature A, 10 N, 50 K/h	335	°C	ISO 306
Vicat softening temperature B, 50 N, 50 K/h	310	°C	ISO 306
Melting Temperature	340	°C	ASTM D 3418

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

Burning Behav.	dry	Unit	Test Standard
Burnin behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3.2	mm	-

Rheological properties	dry	Unit	Test Standard
Melt volume-flow rate, MVR	70	cm ³ /10min	ISO 1133

Temperature	380	°C	-
Load	5	kg	-

Powder properties	dry	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)