

Product Texts
Unreinforced, high-viscosity polyether ether ketone powder

VESTAKEEP® 4000 P is an unreinforced, high-viscosity polyether ether ketone powder. The product is suitable for the manufacture of compounds or it can be used as scatter-powder for the manufacture of composites.

The semi-crystalline polymer features superior thermal and chemical resistance. VESTAKEEP® 4000 P is of low flammability.

VESTAKEEP® 4000 P is supplied as 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 the values.

For information about processing of VESTAKEEP® 4000 P, please follow the general recommendations in our brochure "VESTAKEEP® High Performance in Powder Form Polyether Ether Ketone Powders".

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	11	cm ³ /10min	ISO 1133
Temperature	380	°C	-
Load	5	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3600	MPa	ISO 527
^[C] Yield stress	93	MPa	ISO 527
^[C] Yield strain	5	%	ISO 527
^[C] Nominal strain at break	30	%	ISO 527
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	7	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C	-	-
^[C] Charpy notched impact strength, -30°C	6	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C	-	-

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	337	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	152	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	150	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	205	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	305	°C	ISO 306

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1300	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	380	°C	ISO 294
Injection Molding, mold temperature	180	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

[C]: CAMPUS

Characteristics

Processing

Coating, Transfer Molding

Chemical Resistance

General Chemical Resistance

Delivery form

Powder

Regional Availability

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

Features

Thermal Stability