

Product Information
VESTAKEEP® 5000 P
UNREINFORCED, HIGH-VISCOSITY POLYETHER ETHER KETONE POWDER


VESTAKEEP® 5000 P is an unreinforced, high-viscosity polyether ether ketone powder.

The semi-crystalline polymer features superior thermal and chemical resistance. VESTAKEEP® 5000 P is of low flammability.

VESTAKEEP® 5000 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® 5000 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

Key Features
Industrial Sector

Automotive and Mobility, Aircraft and Aerospace, Energy, Oil and Gas

Processing

Injection molding, Press and sintering, Coating

Delivery form

Powder

Resistance to

Heat (thermal stability), Fire / burn

Additives

Unfilled

Mechanical properties ISO

Tensile modulus

dry

3500

Unit

MPa

Test Standard

ISO 527

Tensile strength

95

MPa

ISO 527

Yield stress

95

MPa

ISO 527

Yield strain

5

%

ISO 527

Stress at break	77	MPa	ISO 527
Nominal strain at break, tB	27	%	ISO 527
Charpy notched impact strength, +23°C	9	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-

Thermal properties	dry	Unit	Test Standard
Melting temperature	336	°C	ISO 11357-1/-3
Glass transition temperature, 2 nd heating, midpoint	152	°C	ISO 11357
Melting Temperature	336	°C	ASTM D 3418

Rheological properties	dry	Unit	Test Standard
Melt volume-flow rate, MVR	7.6	cm ³ /10min	ISO 1133
Temperature	380	°C	-
Load	5	kg	-

Test specimen production	dry	Unit	Test Standard
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

Characteristics

Applications

Electrical and Electronical

Processing

Scatter coating

Special Characteristics

High viscosity

Chemical Resistance

General chemical resistance

This information and all technical and other advice are based on Evonik's present knowledge and experience. However, Evonik assumes no liability for such information or advice, including the extent to which such information or advice may relate to third party intellectual property rights. Evonik reserves the right to make any changes to information or advice at any time, without prior or subsequent notice. Evonik disclaims all representations and warranties, whether express or implied, and shall have no liability for, merchantability of the product or its fitness for a particular purpose (even if Evonik is aware of such purpose), or otherwise. EVONIK SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. It is the customer's sole responsibility to arrange for inspection and testing of all products by qualified experts. Reference to trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used.

* is a registered trademark of Evonik Industries AG or one of its subsidiaries

Evonik Operations GmbH
Smart Materials
High Performance Polymers
 45772 Marl / Germany
 Tel: +49 2365 49-9878
evonik-hp@evonik.com
www.plastics-database.com