

Product Information

VESTAKEEP® 1000 UFP5

UNREINFORCED, LOW-VISCOSITY POLYETHER ETHER KETONE ULTRA-FINE POWDER



VESTAKEEP® 1000 UFP5 is an unreinforced, low-viscosity polyether ether ketone ultra-fine powder. The product can be used for coatings according to the tribo-method or can be applied in a suspension.

The semi-crystalline polymer features superior thermal and chemical resistance. VESTAKEEP® 1000 UFP5 is of flammability.

VESTAKEEP® 1000 UFP5 is supplied as a powder in boxes with moisture-proof polyethylene liners.

Pigmentation may affect values.

*Values measured on VESTAKEEP® 1000 P

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.

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

Resistance to

Heat (thermal stability), Fire / burn, Hydrolysis / hot water

Delivery form

Powder

Additives

Unfilled

Mechanical properties ISO

	Value	Unit	Test Standard
Tensile modulus	3800	MPa	ISO 527
Yield stress	105	MPa	ISO 527
Yield strain	5.5	%	ISO 527
Nominal strain at break, tB	10	%	ISO 527
Charpy impact strength, +23°C	60	kJ/m ²	ISO 179/1eU
Type of failure	C	-	-

Charpy impact strength, -30°C	60	kJ/m ²	ISO 179/1eU
Type of failure	C	-	-
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-
Charpy notched impact strength, -30°C	5	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-

Thermal properties	Value	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	Value	Unit	Test Standard
Density	1300	kg/m ³	ISO 1183
Density	1300	kg/m ³	ASTM D 792

Burning Behav.	Value	Unit	Test Standard
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.6	mm	-

Rheological properties	Value	Unit	Test Standard
Melt volume-flow rate, MVR	140	cm ³ /10min	ISO 1133
Temperature	380	°C	-
Load	5	kg	-

Powder properties	Value	Unit	Test Standard
--------------------------	--------------	-------------	----------------------

Bulk density, powder	230	g/l	EN ISO 60
Particle size, D(50)	5	µm	ISO 13320, DIN ISO 8130-13

Characteristics

Applications

Electrical and Electronical

Processing

Electrostatic coating

Special Characteristics

Semi-crystalline, Environmental stress crack resistance, Low viscosity

Features

Dispersion coating

Color

Natural color

Delivery form

Ultrafine powder (UFP)

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