

Product Information

VESTAKEEP® 2000UFP20

Unreinforced, medium-viscosity polyether ether ketone ultra-fine powder

VESTAKEEP 2000UFP20 is an unreinforced, medium-viscosity polyether ether ketone ultra-fine powder. The product can be used for coatings according to the tribo-method or it can be applied in a suspension.

The semi-crystalline polymer features superior thermal and chemical resistance. VESTAKEEP 2000UFP20 is self-extinguishing.

VESTAKEEP 2000UFP20 is supplied as a powder in boxes with moisture-proof polyethylene liners.

For information about processing of VESTAKEEP 2000UFP20, please follow the general recommendations in our brochure "VESTAKEEP Polyether Ether Ketone."

For further information, please contact us at evonik-hp@evonik.com.

Powder Information

Property		Test method	Unit	VESTAKEEP	
Troperty		international	national	Oilit	2000UFP20
App. bulk density		ISO 60	DIN 53 468	g/dm³	270
Average particle size	d50		Malvern Mastersizer	μm	approx. 20

Application technology properties

Property			Test method international	national	Unit	VESTAKEEP 2000UFP20
Density		23°C	ISO 1183	DIN EN ISO 1183	g/cm³	1.30
Tensile test			ISO 527-1	DIN EN ISO 527-1		
Stress at yield			ISO 527-2	DIN EN ISO 527-2	MPa	100
Strain at yield					%	5
Strain at break					%	30
Tensile modulus			ISO 527-1/2	DIN EN ISO 527-1/2	MPa	3700
CHARPY impact strength			ISO 179/1eU	DIN EN ISO 179/1eU		
		23°C			kJ/m²	$N^{1)}$
		−30°C			kJ/m²	$N^{1)}$
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA			
		23°C			kJ/m²	6 C ¹⁾
		−30°C			kJ/m²	6 C ¹⁾
Temperature of deflection	1		ISO 75-1	DIN EN ISO 75-1		
under load			ISO 75-2	DIN EN ISO 75-2		
Method A	1.8	MPa			°C	155
Method B	0.45	MPa			°C	205
Vicat softening temperature		ISO 306	DIN EN ISO 306			
Method A		10 N			°C	335
Method B		50 N			°C	310
Melting range			ISO 11357			
DSC	2 nd he	ating			°C	approx. 340
Melt volume-flow rate (MVR)		ISO 1133	DIN EN ISO 1133			
380°C/5 kg					cm ³ /10 min	70
Flammability acc. UL94	3.	2 mm	IEC60695	UL94		V-0

Pigmentation may affect values.

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 $^{^{1)}}$ C = Complete break, incl. hinge break H N = No break

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