

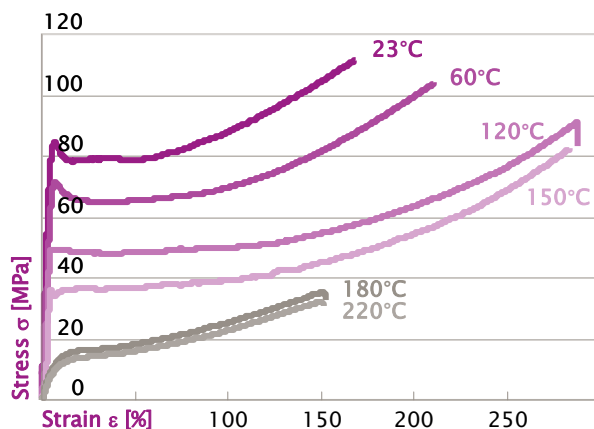
## Product Information

# VESTAKEEP® film OFH80

VESTAKEEP films are based on unreinforced polyether ether ketone.

The semi-crystalline films feature superior thermal and chemical resistance, excellent abrasion resistance, good electrical properties and good flammability.

### VESTAKEEP Tensile vs Temperature



Thicknesses from 25µm up to 750µm are available.

Standard thicknesses are 25, 50, 75, 100 and 125µm. The standard width is 500mm. Please inquire for further thicknesses or widths.

Films are supplied in roll form with 3'' or 6'' core, as cut-to-size sheets or slit to tapes.

**Please contact us for further information.**

## VESTAKEEP® film – properties

Property	Test method	Unit	VESTAKEEP OFH80 50µm
Specific Gravity <sup>*)</sup> 23°C	ISO 1183	g/cm <sup>3</sup>	1.30
Thickness Tolerance			+/-5%
Melting range	DSC, 2 <sup>nd</sup> heating	°C	~340
Dimensional Stability T = 150°C ~ T <sub>g</sub> MD TD	ASTM D1204		0,0% 0,0%
Dimensional Stability T = 220°C > T <sub>g</sub> MD TD	ASTM D1204		0,5% to 1,0% -0,2 to 0%
Tensile test 100mm/min Tensile Strength Yield Strength Strain at break	ISO 527-3	MPa MPa	130 85 110%
Flammability 50µm 125µm	UL94 VTM / ISO 9773		VTM-1 VTM-0/1
Oxygen index <sup>*)</sup> 3.2 mm	ISO 4589		38%
Water absorption <sup>*)</sup> saturation	ISO 62		0.5%
Vicat softening temperature <sup>*)</sup> Method A 10 N Method B 50 N	ISO 306	°C °C	335 305
Water vapour transmission rate 25µm, 38°C/90% rH	ASTM F1249	g/ m <sup>2</sup> d	30
Oxygen transmission rate 25µm, 23°C/50% rH	ISO 15105-2	cm <sup>3</sup> / m <sup>2</sup> d bar	390

<sup>\*)</sup> bulk material data

## VESTAKEEP® film – tensile vs thickness

Tensile test 100mm/min		25µm	50µm	75µm	100µm	125µm
Tensile Strength	MPa	Tbd	130	115	110	105
Yield Strength	MPa		85	90	90	90
Strain at break			110%	>150%	>150%	>150%

### VESTAKEEP® film 0FH80 – dielectric strength

	Test method	Unit	25µm	50	75	100	125	190
Breakdown Voltage Dielectric Strength	EN 60243-1 / VDE 0303-21 DC	kV kV/mm		18 360	24 320	27 270		
Breakdown Voltage Dielectric Strength	IEC 60243-1 / Electrode: ¼" diam. AC 60Hz	kV kV/mm	6.3 250	10 190	13 170		16 124	20 103

### VESTAKEEP® – bulk electrical properties

Property		Test method	Unit	VESTAKEEP resin
Relative permittivity	50 Hz	IEC 60250		2.8
	1 kHz			2.9
	1 MHz			2.8
Dissipation factor	1 kHz	IEC 60250		0.003
	1 MHz			0.005
Comparative tracking index Test solution A	CTI	IEC 60112		200
	100 drops value			175
Volume resistance		IEC 60093	Ohm	10 <sup>14</sup>
Volume resistivity		IEC 60093	Ohm · cm	10 <sup>15</sup>
Surface resistance R <sub>0A</sub>		IEC 60093	Ohm	10 <sup>14</sup>
Spec. surface resistance		IEC 60093	Ohm	10 <sup>15</sup>

This information and all further technical advice are based on Evonik Degussa's present knowledge and experience. However, Evonik Degussa assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights. In particular, Evonik Degussa disclaims all conditions and warranties, whether expressed or implied, including the implied warranties of fitness for a particular purpose or merchantability. Evonik Degussa shall not be responsible for consequential, indirect or incidental damages (including loss of profits) of any kind. Evonik Degussa reserves the right to make any changes according to technological progress or further developments. It is the customer's responsibility and obligation to carefully inspect and test any incoming goods. Performance of the product(s) described herein should be verified by testing and carried out only by qualified experts. It is the sole responsibility of the customer to carry out and arrange for any such testing. Reference to trade names used by other companies is neither a recommendation, nor an endorsement of any product and does not imply that similar products could not be used.