

**Product Texts**

**Natural colored polyether ether ketone for dental applications**

VESTAKEEP® D4 R is natural colored polyether ether ketone (PEEK) rod stock that is especially designed for removable and fixed dentures crowns and bridges.

**Biocompatibility of VESTAKEEP® Dental**

For VESTAKEEP® D4 R, biocompatibility has been tested following ISO 10993-1 recommendations for permanent mucous membrane contact.

The composition is optimised for high biocompatibility and superior mechanical, thermal and chemical resistance.

**Biocompatibility test reports available for VESTAKEEP® D4 R**

Standard	Description
ISO 10993-03	Genotoxicity: Salmonella Typhimurium Reverse Mutation Test (Ames Test)
ISO 10993-05	Cytotoxicity: Quantitative Growth Inhibition Test
ISO 10993-10	Irritation: Intracutaneous Reactivity
ISO 10993-10	Sensitization: Local Lymph Node Assay
ISO 10993-11	Acute Systemic Toxicity
ISO 10993-11	Subacute / Subchronic Toxicity 14 days
ISO 10993-18	Extraction Tests
USP Class VI	Acute Systemic Toxicity Intracutaneous Reactivity Muscle Implantation

**Delivery of VESTAKEEP® Dental**

VESTAKEEP® D4 R rods are available in standard diameter 100 mm and 1000 mm length. Other dimensions are available on request.

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](mailto:EVONIK-HP@EVONIK.COM)  
OR VISIT OUR PRODUCT AT [WWW.EVONIK.COM/MEDICAL-TECHNOLOGY](http://WWW.EVONIK.COM/MEDICAL-TECHNOLOGY)

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	4000	MPa	ISO 527
<sup>[C]</sup> Yield stress	110	MPa	ISO 527
<sup>[C]</sup> Yield strain	4.8	%	ISO 527
<sup>[C]</sup> Nominal strain at break	>50	%	ISO 527

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	45	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.6	mm	-

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	0.4	%	Sim. to ISO 62
<sup>[C]</sup> Density	1300	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Delivery form**

Natural Color, Semifinished product

**Certifications**

Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved

**Features**

Thermal Stability

**Applications**

Medical

**Chemical Resistance**

General Chemical Resistance

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