

Product Texts**Implantable grade polyether ether ketone rod stock for permanent implants**

VESTAKEEP® i5 R is rod stock based on implantable grade neat polyether ether ketone resin VESTAKEEP® i5 G.

Proven Biocompatibility of VESTAKEEP® i-Grades

The extra high purity and extended quality measures make VESTAKEEP® i-grade materials an excellent choice for permanent implants.

The biocompatibility of VESTAKEEP® i5 R has been tested following ISO 10993-1 recommendations for permanent tissue/bone contact and USP Class VI.

VESTAKEEP® i5 R complies to ASTM F2026 "Standard Specification for Polyetheretherketone (PEEK) Polymers for Surgical Implant Applications".

A summary of biocompatibility test results is available upon request.

Biocompatibility tests available for i5 R**Delivery of VESTAKEEP® i-Grades**

VESTAKEEP® i5 R rods are available in different diameters and lengths.

Dimensions of VESTAKEEP® i5 R

Diameter	Standard length*
6 to 20 mm	3000 mm
25 to 60 mm	2000 mm
70 to 100 mm	1000 mm

* Custom lengths are also available

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.EVONIK.COM/MEDICAL-TECHNOLOGY

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3900	MPa	ISO 527
^[C] Yield stress	105	MPa	ISO 527
^[C] Yield strain	4.6	%	ISO 527
^[C] Nominal strain at break	20	%	ISO 527
^[C] : CAMPUS			
Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	340	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	155	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	205	°C	ISO 75-1/-2
^[C] : CAMPUS			
Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	2.8	-	IEC 62631-2-1
^[C] : CAMPUS			

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.4	%	Sim. to ISO 62
^[C] Humidity absorption	0.12	%	Sim. to ISO 62
^[C] Density	1300	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Delivery form

Semifinished product

Applications

Medical

Certifications

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

Regional Availability

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