Product Texts

Implantable grade polyether ether ketone plates for permanent implants

VESTAKEEP® i4 PL are plates based on implantable grade VESTAKEEP® i4 G neat polyether ether ketone resin.

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.

For VESTAKEEP® i4 PL, biocompatibility has been tested according to ISO 10993-1 recommendations for permanent tissue/bone contact and USP Class VI.

VESTAKEEP® i4 PL complies 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 i4 PL

Delivery of VESTAKEEP® i-Grades

VESTAKEEP® i4 PL plates have thickness of up to 60 mm, standard width of 500 mm and standard length of 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	**4000**	MPa	ISO 527
[C] Yield stress	**109**	MPa	ISO 527
[C] Yield strain	**4.8**	%	ISO 527
[C] Nominal strain at break	**>50**	%	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/m³	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