GENESIS MEDICAL PLASTICS

TECHNICAL DATA SHEET

IMPLANTABLE GRADE GENESIS PEEK SHAPES

Description:

Implantable grade Genesis PEEK machinable shapes are extruded from implantable PEEK resin that meets or exceeds requirements of the latest version of ASTM F2026. The PEEK resin is produced in a cGMP clean room setting and in accordance with ISO 10993.

Genesis PEEK extruded shapes and film comply with with most current version of the ASTM F2026 Specification Standard.

Typical Applications – Implantable Genesis PEEK Machinable Shapes:

- Spinal fusion cages
- Suture anchors
- Joint replacements
- Dental implants
- Spinal rods
- Cardiovascular implants
- CMF surgical applications
- Intramedullary implants

Genesis PEEK Extruded Shapes Properties*

PHYSICAL PROPERTIES	TYPICAL VALUES	ASTM F2026-17
Tensile Strength	110.8 MPa at yield 78.8 MPa at break	90 MPa 70 MPa
Tensile Elongation	7%	5%
Flexural Strength	161.8 MPa	110 MPa
Flexural Modulus	4.13 GPa	3.0 GPa
Impact Strength	156.52 J/m	50 J/m
Density	1.31 g/cc	1.28 - 1.32 g/cc
THERMAL PROPERTIES		
Peak Melting Temperature / T_m	338° C	320 - 360°C
Peak Crystallization Temperature/ T_c	288°C	260 - 320°C
Glass Transition Temperature / T_g	150°C	125 - 165°C
ADDITIONAL INFORMATION	**TYPICAL VALUES**	**TEST METHOD**
Cytotoxicity	Pass	ISO 10993:5
Physiochemical Testing	Pass	ISO 10993:18

*Typical properties data are derived from standard ASTM test specimens machined from 40mm Genesis PEEK rod and tested under laboratory conditions. The data values shown do not represent or indicate suitability for use in any application. It is the sole responsibility of the user to determine whether any material is suitable for an actual application. This requires a thorough evaluation of materials by the user relative to actual application performance and regulatory requirements to validate suitability for devices or device components.