

Technical data sheet

SUSTASON PPSU MG (Medical Grade Polyphenylsulfone - Radel®)

Product characteristics

- Easily sterilized; high heat deflection
- High rigidity & stiffness
- Highly resistant to gamma and x-rays

Typical field of application

- Medical engineering
- Rehabilitation applications

Physical Properties	tested method	unit	value
Specific Gravity	D792	g/cm ³	1.29
Water Absorption 24 hours	D570	%	0.37
Water Absorption Saturation	D570	%	1.1
Mechanical Properties	tested method	unit	value
Hardness	D785	Shore D	D80
Rockwell Hardness	D785	M	M80
Rockwell Hardness	D785	R	R120
Tensile Strength at yield 73 °F	D638	psi	11,000
Tensile Modulus	D638	psi	390,000
Elongation at Break	D638	%	30
Flexural Strength	D790	psi	15,500
Flexural Modulus	D790	psi	350,000
Compressive Strength	D695	psi	14,000
Izod Impact, Notched	D256	ft-lb/in	13.0
Thermal Properties	tested method	unit	value
CTE, linear	D696	in/in/°F	3.1x10 ⁻⁵
Melting Point	D3418	°F	424
Continuous Use	-	°F	320
Thermal Conductivity	-	in/hr/ft ² /F°	2.42
Deflection Temperature at 1.8Mpa (66psi)	D648	°F	417
Deflection Temperature at 1.8Mpa (264psi)	D648	°F	420
Electrical Properties	tested method	unit	value
Surface resistivity	D257	Ohm/cm	10 ¹⁶
Compliance Properties	tested method	unit	value
FDA	-	-	Yes
ASTM	D6394	-	Yes
USP Class VI	-	-	Yes
ISO 10993-5	Certified	-	Yes
Colors: Bone, Black, Blue, Grey, Green, Purple, Brown, Yellow, Red, Rust & Orange			

The data stated above are average values ascertained by statistical tests on a regular basis. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.