

Technical Data Sheet

Sustason[®] PPSU MG (Radel[®] R5500) dark grey -

ASTM

PPSU

Typical characteristics

- Good sterilisation resistance
- High heat deflection temperature
- ISO 10993-5 tested on semi-finished product
- High impact resistance
- Chemical resistant
- High resistance to gamma and x-rays

Typical industries

- Healthcare
- Surgery

	Test method	Unit	Guideline value
General properties			
Density	ASTM D792	g / cm ³	1.29
Water Absorption 24 hours	ASTM D570	%	0.37
Water Absorption Saturation	ASTM D570	%	1.1
Mechanical properties			
Hardness	ASTM D2240	Shore D	80
Tensile Strength at yield 73°F	ASTM D638	psi	11000
Tensile Modulus	ASTM D638	psi	390000
Elongation at Break	ASTM D638	%	30
Flexural Strength	ASTM D790	psi	1500
Flexural Modulus	ASTM D790	psi	350000
Compressive Strength	ASTM D695	psi	14000
Rockwell Hardness	ASTM D785	M	80
Rockwell Hardness	ASTM D785	R	120
Izod Impact, Notched	ASTM D256	ft-lb/in	13
Thermal properties			

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	Test method	Unit	Guideline value
Thermal Conductivity		in/hr/ft ² /°F	2.42
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 ⁻⁵	3.1
Melting Point		°F	424
Continuous Service Temperature, Air		°F	320
Deflection Temperature at 1.8Mpa (264psi)	ASTM D648	°F	420
Deflection Temperature at 1.8Mpa (66psi)	ASTM D648	°F	417
Electrical properties			
Surface resistivity	ASTM D257	Ω/cm	10 ¹⁶
Compliance properties			
FDA			Yes
NSF			No
USDA			Yes

