

### Technical Data Sheet

## Sustason<sup>®</sup> PPSU MG (Radel<sup>®</sup> R5500) bone NT15 -

### ASTM

#### Typical characteristics

- Good sterilisation resistance
- High heat deflection temperature
- High impact resistance
- ISO 10993-5 tested on semi-finished product
- Chemical resistant

#### Typical industries

- Healthcare

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	ASTM D792	g / cm <sup>3</sup>	1.29
Water Absorption 24 hours	ASTM D570	%	0.37
Water Absorption Saturation	ASTM D570	%	1.1
<b>Mechanical properties</b>			
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	15500
Flexural Modulus	ASTM D790	psi	350000
Compressive Strength	ASTM D695	psi	14000
Rockwell Hardness	ASTM D785		80
Rockwell Hardness	ASTM D785	R	120
Izod Impact, Notched	ASTM D256	ft-lb/in	13
<b>Thermal properties</b>			
Thermal Conductivity		in/hr/ft <sup>2</sup> /°F	2.42

#### Roehling Industrial Gastonia, LP

903 Gastonia Technology Parkway • 28034 Dallas/United States (US) • Tel. +1 704 922-7814  
 info.gastonia@roehling.com • www.roehling.com/industrial/rep-us

Print: 19/11/2024 • Release: 08/11/2024 • Version: 2.0

PIM-Version: 63 • PIM-ID: 717937 • PIM-Code: 63-15-21.11.18.19.33-9-2

Page 1 / 2 (Dates in DD/MM/YYYY)



	Test method	Unit	Guideline value
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 <sup>-5</sup>	3.1
Melting Point	ASTM D789	°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
<b>Electrical properties</b>			
Surface resistivity	ASTM D257	Ω/cm	10 <sup>16</sup>
<b>Compliance properties</b>			
FDA			Yes
NSF			No
USDA			Yes

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.

