

## Technical Data Sheet

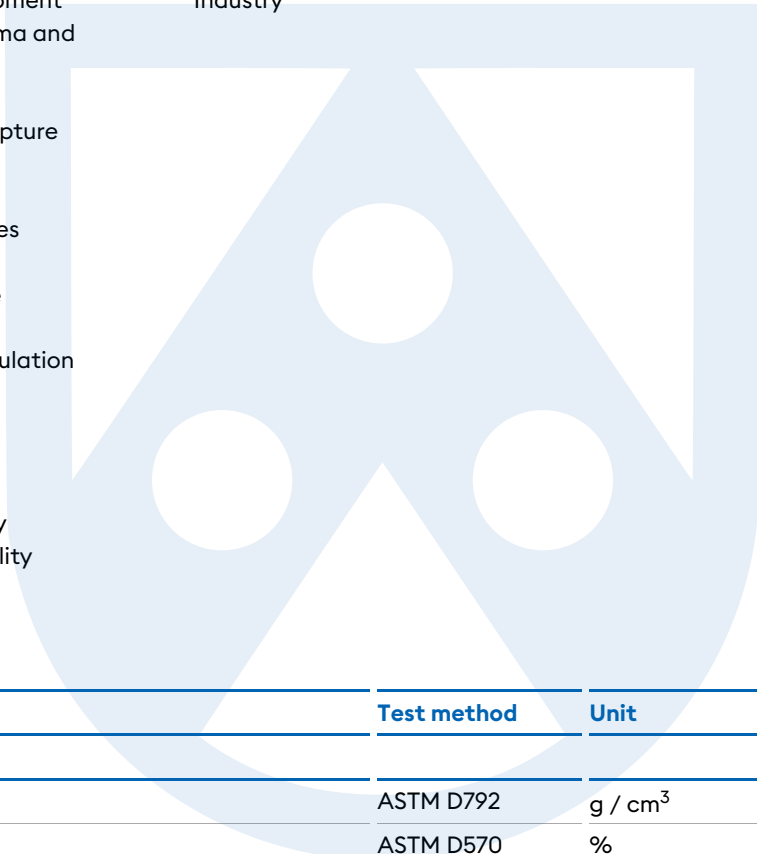
# Sustason<sup>®</sup> PPSU - ASTM

### Typical characteristics

- Sterilization resistant
- High heat deflection temperature
- Very low smoke development
- highly resistant to gamma and x-rays
- High tensile strength
- extremely high creep rupture strength
- Good machinability
- good adhesive properties
- Very good weldability
- High continuous service temperature
- Very good electrical insulation properties
- favourable dielectric behaviour
- High stiffness
- Good thermoformability
- Good dimensional stability
- Good impact strength

### Typical industries

- Electronics
- Healthcare
- Mechanical Engineering Industry



	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
Dissipation Factor	ASTM D150	1MHz	0.002
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



	Test method	Unit	Guideline value
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
Shear Strength	ASTM D732	psi	9000
Izod Impact, Notched	ASTM D256	ft-lb/in	13
<b>Thermal properties</b>			
Thermal Conductivity		in/hr/ft <sup>2</sup> /°F	2.42
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
Flammability, UL94		1/8 inch	V-0
<b>Electrical properties</b>			
Dielectric constant	ASTM D150	1MHz	3.4
Dielectric strength	ASTM D149	V/mil	400
Surface resistivity	ASTM D257	Ω/cm	>10 <sup>13</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.

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