

Technical Data Sheet

Sustatron[®] PPS - ASTM

PPS

Typical characteristics

- High continuous service temperature
- High hardness
- High rigidity
- Flame retardant
- Self-extinguishing
- Good machinability
- good adhesive properties
- Glassfibre-reinforced version
- Electrically insulating
- Chemical resistant

Typical industries

- Conveyor Technology & Automation
- Mechanical Engineering Industry
- Semiconductor CMP
- Semiconductor Back-End applications
- Semiconductor High and low temperature
- Semiconductor Dicing

	Test method	Unit	Guideline value
General properties			
Density	ASTM D792	g / cm ³	1.35
Water Absorption 24 hours	ASTM D570	%	0.01
Dissipation Factor	ASTM D150	1MHz	0.001
Water Absorption Saturation	ASTM D570	%	0.03
Mechanical properties			
Hardness	ASTM D2240	Shore D	85
Tensile Strength at yield 73°F	ASTM D638	psi	13000
Tensile Modulus	ASTM D638	psi	480000
Elongation at Break	ASTM D638	%	15
Flexural Strength	ASTM D790	psi	21000
Flexural Modulus	ASTM D790	psi	575000
Compressive Strength	ASTM D695	psi	21000
Rockwell Hardness	ASTM D785		95
Rockwell Hardness	ASTM D785	R	125
Shear Strength	ASTM D732	psi	9000
Izod Impact, Notched	ASTM D256	ft-lb/in	0.5

ri-inquiry@roechling.com • www.roechling.com/industrial/materials



	Test method	Unit	Guideline value
Thermal properties			
Thermal Conductivity		in/hr/ft ² /°F	2
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 ⁻⁵	2.8
Melting Point	ASTM D789	°F	535
Continuous Service Temperature, Air		°F	425
Deflection Temperature at 1.8Mpa (264psi)	ASTM D648	°F	230
Deflection Temperature at 1.8Mpa (66psi)	ASTM D648	°F	400
Flammability, UL94		1/8 inch	V-0
Electrical properties			
Dielectric constant	ASTM D150	1MHz	3
Dielectric strength	ASTM D149	V/mil	540
Surface resistivity	ASTM D257	Ω/cm	>10 ¹³
Compliance properties			
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.

