

# Technical data sheet

## SUSTATRON® PPS (Polyphenylene sulfide)

### Product characteristics

- High continuous service temperature
- Good hardness & rigidity
- Very good chemical resistance & self-extinguishing

### Typical field of application

- Vehicle construction
- Electrical industry
- Aircraft industry

Physical Properties	tested method	unit	value
Specific Gravity	D792	g/cm <sup>3</sup>	1.35
Water Absorption 24 hours	D570	%	0.01
Water Absorption Saturation	D570	%	0.03
Dissipation Factor	D150	1 MHz	0.001
Mechanical Properties	tested method	unit	value
Hardness	D785	Shore D	D85
Rockwell Hardness	D785	M	M95
Rockwell Hardness	D785	R	R125
Tensile Strength at yield 73 °F	D638	psi	13,000
Tensile Modulus	D638	psi	480,000
Elongation at Break	D638	%	15
Flexural Strength	D790	psi	21,000
Flexural Modulus	D790	psi	575,000
Compressive Strength	D695	psi	21,000
Shear Strength	D732	psi	9,000
Izod Impact, Notched	D256	ft-lb/in	0.5
Coefficient of Friction, Dynamic	-	-	-
Thermal Properties	tested method	unit	value
CTE, linear	D696	in/in/°F	2.8x10 <sup>-5</sup>
Melting Point	D3418	°F	535
Continuous Use	-	°F	425
Thermal Conductivity	-	in/hr/ft <sup>2</sup> /F°	2
Deflection Temperature at 1.8Mpa (66psi)	D648	°F	400
Deflection Temperature at 1.8Mpa (264psi)	D648	°F	230
Flammability, UL94	-	1/8 inch	V-0
Electrical Properties	tested method	unit	value
Dielectric constant	D150	-	3
Surface resistivity	D257	Ohm/cm	4.5x10 <sup>16</sup>
Dielectric strength	D149	V/mil	540
Compliance Properties	tested method	unit	value
FDA	-	-	Yes
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.