



Technical Products, Inc.

P: 262-335-3635 | F: 262-335-3606

E: tpi@technicalproductsinc.com

www.technicalproductsinc.com

Semitron® ESD 480 Material Specifications

Semitron® is a high performance material for use in the semiconductor industry.

Physical Properties	Units	Test	ESd 480
Density	lb/in ³ g/cm ³	D792	0.054 1.49
Water Absorption, 24 hrs.	%	D570	0.18
Water Absorption, Saturation	%	D570	-

Mechanical Properties	Units	Test	ESd 480
Tensile Strength	psi	D638	14,500
Tensile Modules	psi	D638	940,000
Tensile Elongation at Break	%	D638	2.5
Flexural Strength	psi	D790	22,000
Flexural Modulus	psi	D790	950,000
Compressive Strength	psi	D695	25,500
Compressive Modulus	psi	D695	600,000
Hardness Rockwell	-	D785	R122 / M95
Izod Impact Notched	ft-lb/in	D256	1.0

Thermal Properties	Units	Test	ESd 480
Coefficient of Linear Thermal Expansion	X 10 ⁻⁵ in./in./°F	D696	2.8
Heat Deflection Temperature	@264 psi °F/°C	D648	480 / 248
Melting Temperature	°F/°C	D3418	- / -
Max. Operating Temperature	°F/°C	-	475 / 246
Thermal Conductivity	BTU- in/ft ² -hr.-°F x 10 ⁻⁴ cal/cm-sec-°C	C177	- -
Flammability Rating	-	UL94	V - 0

Electrical Properties	Units	Test	ESd 480
Dielectric Strength	(V/mil) short time, 1/8" thick	D149	-
Dielectric Constant	@1 KHz	D150	-
Surface Resistivity	Ohms/Square	EOS/ESD S11.11	10 ⁶ – 10 ⁹
Max Static Decay	sec	Mil-B-81705C	< 2

**The information provided in this table is a compilation of publicly available data. This information is provided for comparison purposes only, and is not intended to be warrantable. Further, Technical Products, Inc. disclaims any and all liability from errors, in accuracies, or omissions.