

# Electrolube<sup>®</sup> TDS100P

# Thermally Conductive, Electrically Isolating Film

# DESCRIPTION

**Electrolube**<sup>®</sup> **TDS100P** is a thermally conductive and electrically isolating film with a thermal conductivity of 1.0 W/m-K. The film has a high compression strength and due to the polyimide reinforcement, TDS100P is resistant to cut-through offering a very high breakdown voltage. **TDS100P** is suitable for high-torque screw applications as well as spring clip mounting.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

# FEATURES AND BENEFITS

- Thermal conductivity of 1.0 W/m-K
- Very high electrical isolation strength
- Reworkable
- Smooth surface for reduced interfacial resistance
- Available in die-cut formats

## APPROVALS

Standard	Status
RoHS	Compliant
REACH	Compliant

### **PRODUCT INFORMATION**

TDS100P is typically converted into customer specific shapes and sizes. Standard sheet size is 320mm x 300mm (12.6 x 11.8"). Other thicknesses are available upon request.



# **TYPICAL PROPERTIES**

Category	Result	Unit	Test Method		
Physical Property					
Color	Gray		Visual		
Thickness	0.15 0.006	mm inch	-		
Reinforcement Layer	Polyimide				
Density	1.6	g/cc	ASTM D792		
Hardness	80	Shore A	ASTM D2240		
Operating Temperature Range	-60 to +180	°C	-		
Flammability Rating	Meets V-0		UL94		
Electrical Properties					
Dielectric Breakdown	12	kV	ASTM D149		
Volume Resistivity	>10 <sup>13</sup>	Ohm - cm	ASTM D257		
Thermal Properties					
Thermal Conductivity	1.0	W/m-K	ASTM D5470		
Thermal Impedance at 20 psi	0.31	°C-inch <sup>2</sup> /W	ASTM D5470		
Thermal Impedance at 100 psi	0.29	°C-inch <sup>2</sup> /W	ASTM D5470		
TECLOOP					
0.30 2 u 2 u 2 u 2 u 2 u 2 u 2 u 2 u	TDS100P	150 nsi)	200 250		



### ADDITIONAL INFORMATION

### Shelf Life: 60 Months

The product should be tested to ensure its suitability for the end application conditions.

#### **SAFETY & WARNING**

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.** 

### **CONTACT INFORMATION**

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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