

4.3 W/mK – Highly thermally conductive, electrically insulative

5390 combines remarkable thermal conductivity with electrically insulative properties. Dark gray and self-leveling, this epoxy is ideal for electronics applications that require intense heat dissipation.

| | |
|---------------------------------|---------------------------------------|
| UNCURED | |
| Work Life | 5 hours @ 25°C |
| Viscosity | Paste @ 25°C |
| Shelf Life | 6 months @ -40°C 12 months @ -60°C |
| CURE OPTIONS | 2 hours @ 80°C 1 hr @ 120°C |
| CURED PROPERTIES | Based on cure of 2 hours @ 80°C |
| Color | Dark Gray |
| Shore D Hardness | D/90/0 |
| Glass Transition Temp (°C) | 20 |
| Density (g/cc) | 3.15 |
| Lap Shear 2024T3 Clad (psi) | 1,300 |
| Linear Shrinkage (%) | 0.16 |
| ELECTRICAL PROPERTIES | Based on cure of 2 hours @ 80°C |
| Dielectric Constant | 7.43 @ 1 MHz |
| Dissipation Factor | 0.019 @ 1 MHz |
| Dielectric Strength (volts/mil) | 470 |
| Volume Resistivity (ohm-cm) | 7.4E+13 @ 500 VDC |
| THERMAL PROPERTIES | Based on cure of 2 hours @ 80°C |
| CTE below Tg (ppm/°C) | 14.4 |
| CTE above Tg (ppm/°C) | 40.8 |
| Glass Transition Temp (°C) | 20 |
| Operating Temp. Range (°C) | -100 to 160 |
| Thermal Conductivity (W/mK) | 4.3 |
| OUTGASSING PROPERTIES | Based on cure of 2 hours @ 80°C |
| TML (%) | 0.55 |
| CVCM (%) | 0.01 |
| WVR (%) | 0.08 |
| ACOUSTIC PROPERTIES | |
| Velocity (m/s) | 4,267 |
| Impedance (MRayles) | 13.441 |
| Loss (dB/cm-MHz) | -8.9 |

KEY FEATURES

Very High Thermal Conductivity

Electrically Insulative

Meets NASA Outgassing Requirements

Ideal for Heat Sink Attach

Injectable

Long Pot Life

Self Leveling

Solvent Resistant

Chat with a specialist:

service@appli-tec.com

603-685-0500 ext. 526

www.appli-tec.com

7 Industrial Way, Unit 1, Salem, NH 03079

The data contained herein is provided for informational purposes only and are believed to be reliable. APPLI-TEC does not guarantee suitability of this product for any resultant application or freedom from patent infringement. Furthermore, APPLI-TEC disclaims any liability for incidental and consequential damages of any kind including but not limited to lost profits.

Rev A

9/1/2023

Density (g/cc)

3.15