

## 0.3 W/mK

This thixotropic, easily reworkable aerospace urethane is ideal for bonding and staking applications where thermal conductivity isn't required. Appli-Thane®7800 was designed specifically to have a 3-4 times longer pot life, half the cure time, and four times longer shelf life than standard aerospace urethanes. The material features a room temperature cure while also meeting NASA's low outgassing requirements. With low modulus and low Tg, 7800 is a suitable substitute for many silicones in electronic applications.

<b>UNCURED</b>	
Work Life @ 25°C	1.5 hours
Viscosity @ 25°C	45,000 cPs
Thixotropic Index	3.0
Shelf Life @ -40°C	6 Months
Shelf Life @ -60°C	9 Months
<b>CURE OPTIONS</b>	2.5 hours @ 66°C    7 days @ 25°C
<b>CURED PROPERTIES</b>	Based on cure of 2.5 hours @ 66°C
Color	Translucent
Shore A Hardness	65
Glass Transition Temp (°C)	-74
Density (g/cc)	1.0
Lap Shear 2024T3 Clad (psi)	500
Tensile Strength (psi)	625
Tensile Modulus (psi)	400
Elongation (%)	90
Fungus Resistance	Non-nutrient
Chloride Ion Concentration, ppm	26.7
<b>ELECTRICAL PROPERTIES</b>	Based on cure of 2.5 hours @ 66°C
Dielectric Constant	3.5 @ 10 kHz    3.1 @ 100 kHz    2.9 @ 1 MHz
Dissipation Factor	0.08 @ 10 kHz    0.06 @ 100 kHz 0.05 @ 1 MHz
Dielectric Strength (volts/mil)	1,220 (thickness=0.02")
Volume Resistivity (ohm-cm)	2.2E 13 @ 500 VDC
<b>THERMAL PROPERTIES</b>	Based on cure of 2.5 hours @ 66°C
CTE below Tg (ppm/°C)	80
CTE above Tg (ppm/°C)	200
Glass Transition Temp (°C)	-74
Operating Temp. Range (°C)	-100 to 125
Thermal Conductivity (W/mK)	0.3
Based on cure of 2.5 hours @ 66°C	

### KEY FEATURES

- Thixotropic
- Electrically Insulative
- Flexible
- Hydrolytic Stability
- Long Pot Life
- Low Glass Transition Temperature
- Low Modulus
- Meets NASA Outgassing Requirements
- Solvent Resistant
- Fungus Resistant

### Chat with a specialist:

[service@appli-tec.com](mailto:service@appli-tec.com)  
603-685-0500 ext. 526  
[www.appli-tec.com](http://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 H

1/13/2023

<b>OUTGASSING PROPERTIES</b>	
TML (%)	0.43
CVCM (%)	0.01
WVR (%)	0.17
<b>ACOUSTIC PROPERTIES</b>	
Velocity (m/s)	1,616
Impedance (MRayles)	1.60
Loss (dB/cm-MHz)	-6.9
Density (g/cc)	1.0