APPLI-TEC
THERMOSET ADHESIVE SOLUTIONS
ISO 9001 / AS9100 CERTIFIED

Appli-Thane® 7800

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.

UNCURED	
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
CURE OPTIONS	2.5 hours @ 66°C 7 days @ 25°C
CURED PROPERTIES	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
ELECTRICAL PROPERTIES	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
THERMAL PROPERTIES	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
- √ RoHS Compliant

Chat with a specialist:

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