

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 T_g, 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
Volume Resistivity	2.2E 13 @ 500 VDC

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

Talk to an engineer:

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Rev F

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(ohm-cm)	
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
OUTGASSING PROPERTIES	
Based on cure of 2.5 hours @ 66°C	
TML (%)	0.43
CVCM (%)	0.01
WVR (%)	0.17
ACOUSTIC PROPERTIES	
Velocity (m/s)	1,616
Impedance (MRayles)	1.60
Loss (dB/cm-MHz)	-6.9
Density (g/cc)	1.0