A flowable, high thermal conductivity urethane

Ideal for aerospace applications as it meets NASA's outgassing requirements. The cured material's ability to not crack or harm bonded rigid components during thermal cycling is a major plus. Appli-Thane® 7300 is also used in manufacturing and automated dispensing applications due to its 4-hour pot life. Provides best-in-class thermal conductivity for applications requiring aggressive heat dissipation of components.

UNCURED		
Work Life	4 hours @ 25°C	
Viscosity	Paste @ 25°C	
Shelf Life	6 months @ -40°C 9 months @ -60°C	
CURE OPTIONS	1 hour @ 120°C 2 hours @ 96°C 4 hours @ 72°C 2 weeks @ 25°C	
CURED PROPERTIES	Based on cure of 2 hours @ 96°C	
Color	Blue	
Shore A Hardness	95	
Shore D Hardness	45	
Glass Transition Temp (°C)	-40	
Density (g/cc)	2.8	
Lap Shear 2024T3 Clad (psi)	500	
Tensile Strength (psi)	450	
Tensile Modulus (psi)	9,500	
Compressive Strength (psi)	1,400	
Compressive Modulus (psi)	14,500	
Elongation (%)	5	
Poisson's Ratio	0.38	
Moisture Absorption (%)	0.03 (24hrs, ambient)	
ELECTRICAL PROPERTIES	Based on cure of 2 hours @ 96°C	
Dielectric Constant	16@10kHz 14@100kHz 11@1MHz	
Dissipation Factor	0.00 @ 10 kHz 0.07 @ 100 kHz 0.18 @ 1 MHz	
Dielectric Strength (volts/mil)	650	
Volume Resistivity (ohm-cm)	1.0E 13 @ 500 VDC	
THERMAL PROPERTIES	Based on cure of 2 hours @ 96°C	
CTE below Tg (ppm/°C)	25	
CTE above Tg (ppm/°C)	75	
Glass Transition Temp (°C)	-40	
Operating Temp. Range (°C)	-100 to 160	
Thermal Conductivity (W/mK)	2.5	

ŀ	KEY FEATURES
ł	High Thermal Conductivity
٢	Meets NASA Outgassing Requirements
E	Electrically Insulative
5	Semi-flexible
5	Superior Thermal Cycling
ŀ	Hydrolytic Stability
I	deal for Electrical Potting
I	njectable
L	ong Pot Life
L	ow Glass Transition Temperature
L	Low Modulus
5	Self Leveling
5	Solvent Resistant
1	/RoHS Compliant

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Rev K

Based on cure of 2 hours @ 96°C
0.19
0.03
0.04
Based on cure of 2 weeks @ 25°C
0.12
0.01
0.03
2,145
6.28
-16.5
2.8