

0316 Urethane Adhesive

Thixotropic consistency keeps material from sagging once applied

0316 is an opaque amber, one-component, precision mixed, degassed, and frozen, electrically isolating, Space Flight Grade, precision mixed and frozen general purpose urethane adhesive. It features a very thixotropic consistency which keeps this material from sagging once applied. This material can be cured at either room or elevated temperatures. 0316 bonds well to most substrates such as metals, glass, ceramics, and plastics and meets NASA outgassing requirements with a TML of 0.61% and a CVCM of <0.01%. The material meets NASA's outgassing requirements.

UNCURED	
Work Life @ 25°C	30 minutes
Pot Life @ 25°C	15 minutes
Viscosity @ 25°C	Paste
Shelf Life	3 weeks @ -40°C 3 months @ -60°C 24 months @ -75°C
CURE OPTIONS	8 hours @ 93°C 7 days @ 25°C 24 hours @ 23°C + 16 hours @ 65°C
CURED PROPERTIES	Based on cure of 8 hours @ 93°C
Color	Opaque Amber
Shore A Hardness	70
Glass Transition Temp (°C)	-70
Density (g/cc)	0.97
ELECTRICAL PROPERTIES	Based on cure of 24 hours @ 23°C + 16 hours @ 65°C
Volume Resistivity (ohm-cm)	5.1E 14 @ 500 VDC
THERMAL PROPERTIES	Based on cure of 24 hours @ 23°C + 16 hours @ 65° C
CTE above Tg (ppm/°C)	188
CTE below Tg (ppm/°C)	Not Determined
Glass Transition Temp (°C)	-76
Operating Temp. Range (°C)	-100 to 130
OUTGASSING PROPERTIES	Based on cure of 24 hours @ 23°C + 16 hours @ 65°C
TML (%)	0.61
CVCM (%)	<0.01
WVR (%)	0.06
OUTGASSING PROPERTIES	Based on cure of 7 days @ 25°C
TML (%)	0.74
CVCM (%)	<0.01
WVR (%)	0.08
ACOUSTIC PROPERTIES	
Velocity (m/s)	1,622
Impedance (MRayls)	1.578

KEY FEATURES	
Bonds Well to Most Substrates	
Electrically Isolating	
Very Thixotropic	
Room or Elevated Temperature Cure	!
Space Flight Grade	
User-friendly Packaging	
Meets NASA Outgassing Requirement	nts

Chat with a specialist:

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Loss (dB/cm-MHz)	-6.7	
Density (g/cc)	0.97	