0176 Epoxy

Low shrinkage during cure

I-TEC

RMOSET ADHESIVE SOLUTIONS ISO 9001 / AS9100 Certified

0176 is a one-component, gray, high strength, electrically insulative, precision mixed, degassed, and frozen epoxy. It features low shrinkage during cure, bonds well to most substrates, and works as gap filler or staking material. 0176 is can be cured at room or elevated temperatures and is available in either an Appli-Pac® or precision mixed, degassed, and frozen syringes. The material meets NASA outgassing at multiple cure temperatures.

UNCURED	
Viscosity @ 25°C	55,000 cPs
Pot Life @ 25°C	1.25 hours
Shelf Life	12 months @ 25°C (Appli-Pac®) 6 months @ -40°C (Cryo-Pac®) 10 months @ -60°C (Cryo-Pac®)
CURE OPTIONS	24 hours @ 25°C 8 hours @ 45℃ 2 hours @ 71℃
CURED PROPERTIES	Based on cure of 2 hours @ 71°C
Color	Gray
Shore D Hardness	70
Glass Transition Temp (℃)	23
Lap Shear 2024T3 Clad (psi)	3,500
% Shrinkage Linear	0.9
ELECTRICAL PROPERTIES	Based on cure of 2 hours @ 71°C
Dielectric Constant	3.4 @ 1000 Hz
Dissipation Factor	0.05 @ 1000 Hz
Values Desistivity (alues and)	
volume Resistivity (onm-cm)	1.0E 15 @ 500 VDC
OUTGASSING PROPERTIES	Based on cure of 24 hours @ 25°C
OUTGASSING PROPERTIES TML (%)	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77
OUTGASSING PROPERTIES TML (%) CVCM (%)	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01
OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%)	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01 0.22
OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%) OUTGASSING PROPERTIES	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01 0.22 Based on cure of 8 hours @ 45°C
OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%) OUTGASSING PROPERTIES TML (%)	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01 0.22 Based on cure of 8 hours @ 45°C 0.75
OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%) OUTGASSING PROPERTIES TML (%) CVCM (%)	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01 0.22 Based on cure of 8 hours @ 45°C 0.75 0.01
Volume Resistivity (onm-cm) OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%) OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%)	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01 0.22 Based on cure of 8 hours @ 45°C 0.75 0.01 0.22
Volume Resistivity (onm-cm) OUTGASSING TML (%) CVCM (%) WVR (%) OUTGASSING TML (%) CVCM (%) WVR (%) OUTGASSING OUTGASSING OUTGASSING OUTGASSING OUTGASSING OUTGASSING OUTGASSING	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01 0.22 Based on cure of 8 hours @ 45°C 0.75 0.01 0.22 Based on cure of 2 hours @ 71°C
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Volume Resistivity (onm-cm) OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%) OUTGASSING PROPERTIES TML (%) CVCM (%) WVR (%) OUTGASSING TML (%) CVCM (%) WVR (%) OUTGASSING FND CVCM (%) WVR (%) WVR (%) WVR (%)	1.0E 15 @ 500 VDC Based on cure of 24 hours @ 25°C 0.77 0.01 0.22 Based on cure of 8 hours @ 45°C 0.75 0.01 0.22 Based on cure of 8 hours @ 45°C 0.75 0.01 0.22 0.63 0.02 0.25
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KEY FEATURES

Bonds Well to Most Substrates

Electrically Isolating

Meets NASA Outgassing at Multiple Cure Temps.

Low Shrinkage

Room or Elevated Temperature Cure

User-friendly Packaging

Chat with a specialist:

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Rev F

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Impedance (MRayls)	3.254	
Loss (dB/cm-MHz)	-7.3	
Density (g/cc)	1.35	