

5018 Epoxy

Excellent choice for bonding dissimilar substrates and assemblies requiring thick bond lines

5018 is an amber, electrically isolating, toughened, precision mixed, degassed, and frozen epoxy. It features excellent low temperature properties, a long work life of 6 hours, and a low viscosity making it a very user-friendly epoxy. Once cured, this material is tough and flexible, making it an excellent choice for bonding dissimilar substrates and assemblies requiring thick bond lines. 5018 will bond well to most substrates such as metals, glass, ceramics, and most plastics. This material has a CVCM of 0.18% which exceeds the 0.10% limit for low outgassing. The TML is 0.75% which does pass low outgassing.

This product will exotherm if cured at high temperatures in masses greater than 5 grams. Contact Appli-Tec for step cure instructions if curing in larger masses.

UNCURED	
Work Life @ 25°C	6 hours
Viscosity @ 25°C	3,500 cPs
Pot Life @ 25°C	3 hours
Shelf Life	12 months @ -40°C 24 months @ -60°C
CURE OPTIONS	7 days @ 25°C 72 hours @ 45°C 6 hours @ 80°C
CURED PROPERTIES	Based on cure of 6 hours @ 80°C
Color	Amber
Shore D Hardness	80
Glass Transition Temp (°C)	60
Density (g/cc)	1.13
ELECTRICAL PROPERTIES	Based on cure of 6 hours @ 80°C
Volume Resistivity (ohm-cm)	1.0E 14 @ 500 VDC
THERMAL PROPERTIES	Based on cure of 6 hours @ 80°C
Glass Transition Temp (°C)	60
Degradation Temp. (°C)	>240
ACOUSTIC PROPERTIES	
Velocity (m/s)	2,421
Impedance (MRayls)	2.736
Loss (dB/cm-MHz)	-6.9
Density (g/cc)	1.13

Bonds Well to Most Substrates Long Work Life Low Viscosity High Bond Strength Thermal Shock Resistant User-friendly Packaging
Low Viscosity High Bond Strength Thermal Shock Resistant
High Bond Strength Thermal Shock Resistant
Thermal Shock Resistant
User-friendly Packaging

Chat with a specialist:

service@appli-tec.com 603-685-0500 ext. 526 www.appli-tec.com

7 Industrial Way, Unit 1, Salem, NH 03079

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