5010 Epoxy



An ideal epoxy for operating at elevated temperatures

5010 is an amber, electrically isolating, precision mixed, degassed, and frozen epoxy. It bonds well to most substrates such as glass, plastics, and ceramics. This material changes color upon cure to a dark red color. This material is specifically designed to have a long pot life and a high glass transition temperature making this epoxy ideal for operating at elevated temperatures. 5010 is resistant to fuel, lubricants, water, and weather and features a low viscosity and user-friendly packaging. It is also available in room temperature stable two part kits.

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	
Color Mixed	Amber
Color Part A	Clear Pale Yellow
Color Part B	Amber
Viscosity Mixed @ 25oC	5000 cPs
Viscosity Part A	6,500 cPs
Viscosity Part B	4,000 cPs
Thixotropic Index	1.0
Shelf Life Unmixed @ RT	9 Months
Shelf Life Mixed @ -40°C	9 Months
Mix Ratio A:B	96:4 Parts By Weight
CURE OPTIONS	16 hours @ 25°C + 1 hour @ 120°C 16 hours @ 25°C + 3 hours @ 100°C 16 hours @ 25°C + 5 minutes @ 150°C
CURED PROPERTIES	Based on cure of 1 hour @ 120°C
Color	Dark Red
Shore D Hardness	85
Glass Transition Temp (°C)	130
Density (g/cc)	1.2
Lap Shear 2024T3 Clad (psi)	2,500
ELECTRICAL PROPERTIES	Based on cure of 1 hour @ 120°C
Volume Resistivity	(ohm-cm) 4.7E 16 @ 500 VDC
THERMAL PROPERTIES	Based on cure of 1 hour @ 120°C
Glass Transition Temp (°C)	130
Degradation Temp. (°C)	300
OUTGASSING PROPERTIES	Based on cure of 1 hour @ 120°C
TML (%)	0.46
CVCM (%)	0.02
WVR (%)	0.26
ACOUSTIC PROPERTIES	Based on cure of 1 hour @ 120°C

KEY FEATURES

Bonds Well to Most Substrates

Color Darkens When Cured

High Glass Transition Temperature

High Temperature Resistant

Long Pot Life

Listed on NASA Low Outgassing Website

Resistant to Fuel, Lubricants, Water and Weather

User-friendly Packaging

√RoHS Compliant

Chat with a specialist:

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Velocity (m/s)	2,644
Impendance (MRayls)	3.23
Loss (dB/cm-MHz)	-4.74
Density (g/cc)	1.22