

CONAPOXY[®] AD-10

CONAPOXY[®] AD-10 is a unique single component epoxy that may be used as a structural adhesive or miniature electronic potting compound. The heat-cure formulation was designed for rapid cure at temperatures as low as 200⁰F, yet it exhibits good storage life at room temperature. Good dielectric properties and thermal stability make this epoxy ideal for electrical applications up to 150⁰C.

This single component epoxy may be used to bond to most metals, ceramics, and plastics and it is chemically resistant to many acids and bases. Specific applications include bonding and/or sealing magnet and speaker assemblies, batteries, filters, end cap filters, structural materials, miniature potting and staking.

AD-10 is typically used as an adhesive and should not be used in excess of 1/8" thickness. This epoxy eliminates the possibility of human error when mixing two component systems. By using CONAPOXY[®] AD-10 the manufacturer will save time, ensure quality, and reduce scrap.

TYPICAL PRODUCT CHARACTERISTICS

(THESE ARE TYPICAL DATA AND ARE NOT MEANT TO SERVE AS SPECIFICATIONS.)

	CONAPOXY [®] AD-10
Formerly	DP-9353
Color	Brown
Viscosity @ 25 ⁰ C, cps	Thixo-Non-Flow
Specific Gravity @ 25 ⁰ C	1.27
Solids Content, %	100
Lap Shear AL/AL, psi	3000
Dielectric Strength, vpm	>375
Dielectric Constant, @ 25 ⁰ C, 1KHz	4.0
Dissipation Factor, @ 25 ⁰ C, 1KHz	.006
Operating Temperature	-55 to 150 ⁰ C
Exotherm Rise, 200 Grams cured 120 ⁰ C	*
Shelf life @ 25 ⁰ C, Months	4
Shelf life @ 25 ⁰ C, Months	8

* Not recommended to be cured in excess of 1/8" thickness.

The properties listed on the previous chart are typical, based on several determinations and are not intended for specification purposes.

CURING INFORMATION

The cure times, which follow, were determined using etched aluminum lap shear specimens. Maximum cure is the time required to reach full tensile shear.

CURE TEMPERATURE	MINIMUM	MAXIMUM
200 ⁰ F (93 ⁰ C)	120 minutes	150 minutes
225 ⁰ F (107 ⁰ C)	65 minutes	80 minutes
250 ⁰ F (121 ⁰ C)	30 minutes	40 minutes
275 ⁰ F (135 ⁰ C)	12 minutes	20 minutes
300 ⁰ F (149 ⁰ C)	8 minutes	12 minutes
325 ⁰ F (163 ⁰ C)	5 minutes	8 minutes
400 ⁰ F (204 ⁰ C)	2 minutes	4 minutes

The wide range of cure temperatures allows the user a diversity of cure times to match production requirements.

APPLICATION INSTRUCTIONS

The surface to be bonded or potted should be free of all grease, dirt and foreign matter. For information on optimum surface preparation see our **Surface Preparation Guide AC-107.** For bonding, apply CONAPOXY®AD-10 by suitable means adjusting the glue line from 1 to 10 mils. Contact pressure is suitable for most bonding applications.

HANDLING AND STORAGE PRECAUTIONS

Avoid excessive skin contact. If contact occurs wash skin with copious amounts of soap and water. Provide adequate ventilation. Please refer to the Material Safety Data Sheet.

These epoxies should be stored in a cool, dry area. Storage conditions should not exceed 80⁰ F Under these conditions storage life is expected to be at least four months. The Shelf life may be extended up to 8 months by storing at 5⁰ C.

AVAILABILITY

The single component epoxies in this bulletin are available in gallon, and 5-gallon containers.

An EVALUATION KIT is available for a nominal fee.

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The information presented here is based on carefully conducted laboratory tests and is believed to be accurate. However, results cannot be guaranteed and it is suggested that customers confirm results in their own laboratory before plant tests are made. Nothing contained in this bulletin shall be construed as a recommendation to use any product or process in violation of the claims of any patent now in effect.

NOTICE: Precautionary labels and Materials Safety Data Sheet(s) for all materials referred to, whether the materials are produced by CYTEC INDUSTRIES INC. or other manufacturers, should be fully read and understood by all supervisory personnel and employees before using. For additional safety and health information, contact CYTEC INDUSTRIES INC. Purchaser has the responsibility for determining any applicability of and compliance with federal, state, and local laws and/or regulations involving labeling, use, and waste disposal, particularly in making consumer products.