

UL RECOGNIZED

CONAPOXY® FR-1403

CONAPOXY® FR-1403 is a two-component, low exotherm, flame retardant, long pot life epoxy potting and casting system with excellent properties. Because of its excellent thermal shock resistance, CONAPOXY® FR-1403 is recommended for the encapsulation of strain sensitive devices. CONAPOXY® FR-1403 is also an excellent system for potting and encapsulating of electrical/electronic devices such as modules, transformers, and coils.

Features	Benefits
1 to 1 Mix Ratio	Easy to use
Excellent Thermal Shock	Use in various temperature ranges
Flame Resistant	94 V-O

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

	<u>PART A</u>	<u>PART B</u>
Viscosity @ 25°C	7500 cps	5000 cps
Specific Gravity	1.54	1.57
Color	Black	Tan

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

Hardness, Shore D	82
Tensile Strength, psi	5000
Elongation, %	5
Flame Resistance, 1/8"	UL-94V-0

ELECTRICAL PROPERTIES

	25°C
Dielectric Constant @ 100 Hz	4.71
@ 1KHz	4.51
@ 1 MHz	4.08
Dissipation Factor @ 100 Hz	0.039
@ 1 KHz	0.024
@ 1 MHz	0.017
Volume Resistivity – ohm-cm	1.8 x 10 ¹⁴
Surface Resistivity – ohm	1.7 x 10 ¹⁵
Dielectric Strength, (0.125" thick), vpm	>400

PROCESSING PARAMETERS

Mix Ratio by weight, Resin/Hardener	1:1
Mix Ratio by volume, Resin/Hardener	1:1
Initial Mixed Viscosity @ 25°C	6500 cps
Work Life @ 25°C, 200 gm mass	60 minutes
Gel Time @ 25°C (4.5 lb. Mass)	90 minutes
Full Cure @ 25°C	48-72 hours
Alternate Cure @ 60°C	1-2 hours
Peak Exotherm - 200 gm mass	58°C

HANDLING AND STORAGE INSTRUCTIONS

CONAPOXY® FR-1403, Part A and Part B, have a shelf life of 15 months from date of manufacture when stored in the original unopened containers at 70°-85°F. CONAPOXY® FR-1403 Part A and Part B contain filler. The filler may settle during storage. It is recommended that both components be thoroughly mixed before use.

CAUTION: Responsible handling of Cytec Industries Inc. products requires a thorough preview of safety, health and environmental issues prior to use. Review the Material Safety Data Sheet(s) for the specific Cytec Industries Inc. product(s) and container label information before opening containers. Ensure that employee exposure issues are understood, communicated to all workers, and controls are in place to prevent exposures above Permissible Exposure Limits (P.E.L.'s). Review safety and environmental issues, to be certain controls are in place to prevent injury to employees, the community, or the environment, and assure compliance with all applicable Federal, State, and Local laws and regulations. For assistance in this review process, please call your Cytec Industries Inc. representative or our office noted below.

CONAPOXY® is a registered trademark of Cytec Industries Inc.

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.