

## CONAPOXY® FR-1810

**RoHS COMPLIANT**

**UL RECOGNIZED**

CONAPOXY FR-1810 is a flexible two-component, low exotherm, flame retardant, long pot life epoxy potting and casting system with excellent handling properties.

CONAPOXY FR-1810 contains a non-abrasive filler to reduce wear on machine metering/dispensing equipment. CONAPOXY FR-1810 has been tested by Underwriters Laboratories to be RoHS compliant and recognized to UL 94V-0.

### TYPICAL PRODUCT CHARACTERISTICS

	Resin PART A	Curative PART B
Viscosity @ 25°C	7000 cps	14,000 cps
Specific Gravity	1.55	1.54
Color	Black	Tan

### PROCESSING PARAMETERS

Mix ratio by weight, Resin/Hardener	100:100
Mix ratio by volume, Resin/Hardener	1.0: 1.0
Initial mixed viscosity @ 25°C, cps	8000
Initial mixed viscosity @ 100°F (38°C), cps	3800
Work life @ 25°C to reach 100,000 cps, 200 gm mass, minutes	80
Gel Time, 200 gm mass	2 hrs. 10 min.
Full cure @ 25°C for maximum properties, hours	32-48
Alternate cure @ 60°C, hours	3-4
Maximum exotherm, 225 gm mass (0.5 lb.), °C (°F)	36 (97)

### TYPICAL CURED PROPERTIES

Color	Black
Hardness, Shore D	80-85
Tensile strength, psi	1325
Elongation, %	22
Linear shrinkage, in/in.	0.0006
Moisture absorption, 24 hr. immersion, %	0.41
Flammability, UL Recognized, 4.8 mm	94V-0
Thermal Shock, Olyphant Washer, one cycle = 1 hr @ 130°C plus 1 hr. @ -20°C	Passes 5 cycles

### ELECTRICAL PROPERTIES

	25°C
Dielectric Constant @ 100 Hz	4.75
@ 1KHz	4.39
@ 1 MHz	3.87
Dissipation Factor @ 100 Hz	0.032
@ 1 KHz	0.037
@ 1 MHz	0.021
Volume Resistivity – ohm-cm	7.1 x 10 <sup>13</sup>
Surface Resistivity – ohm	4.7 x 10 <sup>15</sup>
Dielectric Strength, vpm	528

### HANDLING AND STORAGE INSTRUCTIONS

CONAPOXY FR-1810 has a shelf life of 12 months from date of manufacture when stored in the original unopened containers at 70°F-85°F. CONAPOXY FR-1810 Part A and Part B contain filler which 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 Sheets(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 ensure 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.

[www.cytec.com/conap](http://www.cytec.com/conap)

• Email: [custinfo@cytec.com](mailto:custinfo@cytec.com) • Worldwide Contact Info: [www.cytec.com/conap](http://www.cytec.com/conap) • Tel: 716.372.9650. Fax: 716.372.1594 •