



CONAPOXY® FR-1274

RoHS COMPLIANT

UL RECOGNIZED

CONAPOXY FR-1274 is a two-component, low exotherm, flame retardant, long pot life epoxy potting and casting system. Because of its excellent thermal shock resistance, CONAPOXY FR-1274 is recommended for the encapsulation of strain sensitive devices. CONAPOXY FR-1274 is also an excellent system for potting and encapsulating electrical/electronic devices such as modules, transformers, and coils.

- Low cost, low exotherm, low shrinkage
- Flame retardant
- Good thermal conductivity
- Convenient 1-to-1 mix ratio by volume or weight
- Non-abrasive filler for machine metering and dispensing
- Long pot life and room or elevated temperature cure
- Excellent thermal shock resistance

TYPICAL PRODUCT CHARACTERISTICS

	Resin Part A	Curative Part B
Color	Black	Brown
Specific Gravity @ 25°C	1.6	1.6
Viscosity @ 25°C, cps	27,000	55,000
Shelf Life, from date of manufacture	12 months	12 months

TYPICAL CURED PROPERTIES

Physical Properties

Specific Gravity	1.6
Density, lb./cu.in.	0.06
Hardness, Shore D	80
Tensile Strength, psi	5,500
Compressive Strength, psi	10,400
Glass Transition Temp., °C	45°C - 55°C
Linear Thermal Expansion, in./in./°C	22 x 10 ⁻⁶
Linear Shrinkage, in./in.	0.001
Thermal Conductivity, cal/cm/sec/cm ² /°C	20 x 10 ⁻⁴
Flammability, 3mm (UL Recognized)	UL 94V-0

Electrical Properties

Dielectric Strength, vpm	400
Dielectric Constant @ 25°C	
100 Hz	4.42
1 KHz	4.25
1 MHz	3.91
Dissipation Factor @ 25°C	
100 Hz	0.076
1 KHz	0.022
1 MHz	0.014
Volume Resistivity, ohm-cm	8 x 10 ¹⁴
Surface Resistivity, ohms	3 x 10 ¹⁷

RECOMMENDED PROCESSING PROCEDURE

Mix Ratio by Weight or Volume, Resin/Curative (A/B)	1 / 1
Initial Mixed Viscosity @ 25°C, cps	40,000
Gel Time @ 25°C, ½ lb. mass	2-3 hours
Cure @ 25°C	24-48 hours
@ 60°C	3-5 hours
@ 80°C	1-2 hours
Peak Exotherm, 200 gram mass	43°C

HANDLING AND STORAGE

CONAPOXY FR-1274 Part A and Part B contain filler which may settle during storage. It is recommended that both components be thoroughly mixed before use.

The shelf life of CONAPOXY FR-1274 is 18 months from date of manufacture when stored at 65°F-85°F in the original unopened containers.

CAUTION: FOR INDUSTRIAL USE ONLY

CONAPOXY FR-1274 Part A and Part B may cause skin or eye irritation. Use only in well-ventilated areas and avoid inhalation of vapors. If skin contact occurs, wash immediately with soap and water. In case of eye contact, flush eyes immediately with plenty of water.

For additional information, please request Material Safety Data Sheets.

AVAILABILITY

CONAPOXY FR-1274 is available in quart, gallon, 5-gallon, and 55-gallon units.

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.