

# ELECTRICALLY RESISTANT ADHESIVES

Room Temp. Cure, Use to 3000°F

## 2800°F - RESBOND™ 919

### Electrically Resistant Adhesive

Resbond™ 919 was formulated with Cotronics' proprietary ceramic binders to offer an adhesive with exceptionally high electrical resistance.

These special binders maintain their high electrical resistance and dielectric strength even when exposed to temperatures up to 2800°F.

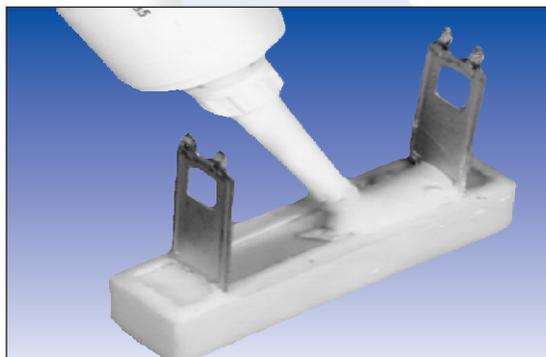
Resbond™ 919 has a dielectric strength of 270 volts/mil and a volume resistivity of  $10^{11}$  ohm-cm (at room temp.).

Just mix the 919 to a creamy paste, apply and dry at room temperature.

#### Users Report:

- Bonds electrode rods into electrically insulating ceramic tubes and protects them from voltage breakdown and corrosive atmospheres.
- Seals light bulb fixtures, insulating them with out cracking when exposed to heat and thermal cycling.
- Forms protective tubes for fiberglass covered extension wires. Protecting against heat and corrosion.

Resbond™ 919 is commonly used for electrical insulation when potting, sealing or coating, ignitors, thermocouples, heating coils, instrumentation, etc.



Applying 919 to a Hi-Power Resistor



and Electrically Insulating Bond

## 3000°F - RESBOND™ 920

### Thermally Conductive Adhesive

Resbond™ 920 offers both high thermal conductivity and the superior electrical resistance of Resbond 919.

It is based on conductive Alumina ceramic and should be used whenever rapid dissipation of heat is required.

Resbond™ 920 has a dielectric strength of 270 volts/mil, volume resistivity of  $10^{11}$  ohm-cm (at room temp.) and a thermal conductivity of 15 BTU in/°F hr. sq. ft.<sup>2</sup>.

It offers excellent electrical, chemical and solvent resistance.

Resbond™ 920 is easy to use. Just mix, apply and cure at room temperature. Cures can be accelerated with mild heat (when required). Resbond™ 920 is easily incorporated into many production processes.

#### Users Report:

- Resbond™ 920 Replaced seven (7) different adhesives, and potting compounds, at a heating element manufacturers plant for use in various applications from - 60°C to 1500°C.

**Applications Include:** Bonding high temperature resistors, pyrometers, heating elements, furnace elements, etc.

Resbond™ 920 is ideal for use in applications where a combination of high electrical resistance and good thermal conductivity is required.

Resbond™ Continuous Use Temp.	919 2800°F	920 3000°F
Base	MgO	Al <sub>2</sub> O <sub>3</sub>
Form	Paste	Paste
Compressive Strength (psi)	4500	4500
Flexural Strength (psi)	450	450
Thermal Expansion (x10 <sup>-6</sup> /°F)	2.60	4.50
Thermal Cond. (BTU-in/Hr. Ft <sup>2</sup> °F)	4	15
Dielectric Strength (volts/mil.)	270	270
Volume Resistivity (ohm-cm)	10 <sup>11</sup>	10 <sup>11</sup>
Components	2	2
Mix Ratio	100:13	100:14
Color	Tan	White
Consistency	Paste	Paste

#### Cat. No. Description

- Resbond 919-1..... Quart
- Resbond 919-2..... Gallon
- Resbond 920-1..... Quart
- Resbond 920-2..... Gallon