

# Ceramic Adhesives

## Electrically Resistant

### **2800°F** *Resbond™ 919 Electrically Resistant*

Exceptionally high electrical resistance. Dielectric strength is 270 volts/mil and volume resistivity is  $10^{11}$  ohm-cm (at room temp.).

Maintains its high electrical resistance and dielectric strength at high temperature.

Users Report Resbond 919 bonds electrodes, seals light bulb fixtures, forms protective tubes for fiberglass covered extension wires and more.

Resbond 919 is ideal for: potting, sealing, coating cable end seals, igniters, heating coils, instrumentation, thermocouples, electronics, and many other electrical applications.



### **2800°F** *Resbond™ 920 Thermally Conductive*

Just mix, apply and let dry. Resbond 920 cures at room temp. to bond, seal, insulate, encapsulate and protect delicate electronics components against heat, electricity, chemicals, corrosion and moisture.

Based on high purity Alumina Ceramic it is ideal for use when rapid dissipation of heat is required

Applications include: bonding, encapsulating, protecting and electrically insulating, high watt resistors, electrodes, extension wires, thermocouples, heat sensors, heating coils, igniters and critical electronic components.



## Fast Set Ceramic Adhesives

### **2000°F** *Resbond™ 940 Fast Setting Adhesive*

Just mix and apply. Cures in 5 minutes at 175°F or in 16 hours at room temp. without any objectionable or toxic odors. 940 is specially formulated with a catalytic activator making it ideal for use in production applications.

Has excellent adhesion to ceramics, metals, glass, etc. and provides high electrical, thermal and shock resistance.

Used for sealing and assembling parts, encapsulate heating elements, form electrically resistant coatings. Users Report Resbond 940 encapsulates industrial heating elements and high temp. Sensors. Resbond 940 outperforms other ceramic adhesives and materials tested.



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### **2600°F** *940LE Fast Set, Low Expansion Adhesive*

Now, for the first time, an adhesive specially designed to bond low expansion materials or use in difficult applications. Easy to use. Just mix and apply. Resbond 940LE cures in minutes to form an electrically and chemically resistant bond that will prevent cracking in thermal shock applications.

Applications include bonding and insulating quartz fixtures, bulbs, halogen lamps, thermocouples, heat sensors, fiber cables, glassware etc.

Users Report: Resbond 940LE bonds high performance light bulbs in a high speed precision production line.



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### **2800°F** *Resbond™ 940HT Fast Set, High Temp. Adhesive*

New, fast setting, Alumina adhesive can be used continuously to 2800°F. Just mix and apply. 940HT sets in 15 minutes and cures in 5 minutes at 175°F.

Excellent adhesion to ceramics, metals, glass, composites, etc. Resistant to liquid metals, most chemicals and solvents, oxidizing and reducing atmospheres and offers good electrical properties.

Applications include bonding sapphire tubes to metal end caps for use to 2650°F and joining metal to ceramic in bonding heating elements to electrical terminals for continuous use at 2500°F. It is ideal for any high temp. bonding application.

## **4000°F Ceramic Adhesives**

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### **1200°F** *Durabond™ Metallic Composites*

Durabond adhesives and putties were specially formulated to bond metals, ceramics, and dissimilar materials for use to 2000°F.

These metallic composite adhesives, overcome the brittle bonds obtained with ceramics and offers some of the ductility and impact resistance associated with soldering and welding.

Durabond Adhesives can be drilled, tapped, machined, etc.

They are safe and easy to use.

Choose from the following formulations:

#### **Durabond 950 Aluminum Based 1200°F Adhesive**

Developed for high strength bonding of steel, cast iron, aluminum, copper, etc.

#### **Durabond 952 Nickel Based 2000°F Adhesive**

Developed for bonding low expansion metals such as 400 series stainless steel, low expansion, high temp. alloys, metals, ceramics etc.

#### **Durabond 954 Stainless Based 2000°F Adhesive**

High expansion adhesive for high temp. bonding of 300 series stainless steels, high expansion metals and ceramics.



## One Component

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### **4000°F** Resbond™ 904 Ultra Temp

A smooth, creamy paste that is easily applied and air dries to form a hard surface.

904 is resistant to molten metals, oxidizing and reducing atmospheres, most chemicals and solvents.

Applications Include: forming electrical seals, bonding instruments, thermocouple protection, high temp. facing for bricks, potting electronics, liquid metal handling, welding, brazing, erosion resistant coatings, etc.



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### **3000°F** Resbond™ 989 One Component Alumina

A high purity, general purpose, room temp. curing adhesive with excellent adhesion to ceramics, graphite, metals and glass.

989 offers high bond strength and solvent and electrical resistance and can be dispensed automatically for high speed production applications.

Applications Include: bonding alumina, metals, ceramics, graphite, and glass in electrical components, appliances, instruments, etc.

**New 989 Fast Set** is ideal for production applications where fast cures and automated dispensing is critical