

# HI-TEMP ADHESIVES

## Single Component - Alumina

### 3000°F - RESBOND™ 989 Alumina Adhesive

Resbond™ 989 is a one component high purity, 3000°F Alumina based, general purpose adhesive.

It has a smooth creamy consistency and cures at room temperature to form strong bonds to ceramics, graphite, metals and glass.

Resbond™ 989 is resistant to oxidation, electricity, molten metals, most chemicals and solvents.

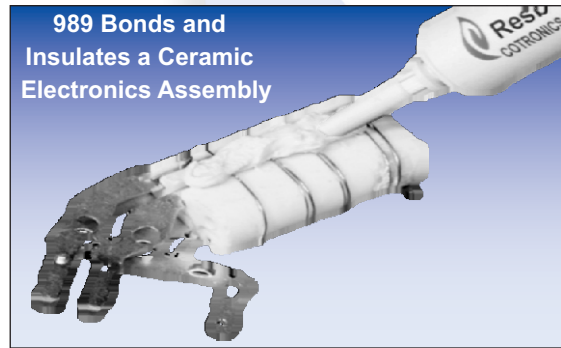
Easy to use, Just apply and air dry.

Curing may be accelerated with mild heat.

#### Users Report:

- Bonds Silicon Carbide nozzles into alumina sleeving in a high temperature instrument chamber.
- Bonds Nickel pins, measuring 0.03" dia. into 0.04" holes in an aluminum nitride ceramic. These parts were quenched (from 900°C) in liquid Nitrogen without failure.
- Bonds Kanthal to Mullite tubes, forming inexpensive custom sized and durable high temp. Heating elements.

**Applications Include:** bonding alumina, metals, ceramics, graphite, electrical components, adhering thermocouples, heat sensors, and critical electronic components, in appliances, instruments, etc.



### 3000°F - RESBOND™ 989FS Fast Set Alumina Adhesive

New, 989 Fast Set is specially formulated for applications requiring a fast setting, single component, alumina adhesive.

Now, a free flowing formulation that is ideal for use in automatic dispensing equipment. It is precisely dispensed through fine needles with out clogging or mess.

Resbond™ 989FS cures at room temp. or in 5 minutes at 200°F.

It is the ideal choice for high speed production applications where automation is required.

### 3000°F - RESBOND™ 989F Pre-Nano Adhesive

The Alumina used to formulate Resbond 989F particle size has been reduced to 600 nms.

Resbond™ 989F combines this ultra-fine Alumina with special high temperature colloidal ceramic binders to create an adhesive ideal for a new generation of applications.

Resbond™ 989F can be used in the finest dispensers. No clogs. No mess. It is an ideal choice for high temp. production applications.

Now, there are no limits to applications requiring a high temperature alumina adhesive and the ability to bond super fine electric components, bundles of fiber optics filaments, cable end seals, components with tight tolerances.

Resbond™	989	989FS	989F
<b>Continuous Use Temp.</b>	3000°F	3000°F	3000°F
<b>Base</b>	Al <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>
<b>Feature</b>	General Purpose	Fast Set	0.6 Micron Ultra Fine
Compressive Strength (psi)	3000	3500	2800
Flexural Strength (psi)	1100	1250	950
Thermal Expansion (x 10 <sup>-6</sup> /°F)	4.50	4.50	4.50
Thermal Cond. (BTU-in/Hr. Ft <sup>2</sup> °F)	15	15	12
Dielectric Strength (volts/mil.)	200	200	200
Volume Resistivity (ohm-cm)	10 <sup>8</sup>	10 <sup>8</sup>	10 <sup>8</sup>
Components	1	1	1
Color	White	White	White
Consistency	Paint	Paint	Cream
Cure @ R.T. (Hours)	2 - 4	½ - 2	2 - 4
Cure @ 200°F (Hours)	½ - 1	5 mins.	1 - 2

#### Availability

Cat. No.	Description	Price
Resbond 989-1	Quart.	130.83
Resbond 989-2	Gallon.	328.63
Resbond 989T-1	Thinner (Pint).	48.47

#### NEW 989 FAST SET

Resbond 989FS-1	Pint	87.44
Resbond 989FS-2	Quart.	152.72

#### NEW 989 ULTRA FINE

Resbond 989F-1	Pint	87.44
Resbond 989F-2	Quart.	152.72

Production Pricing Available Upon Request