ALUMINA BASED ADHESIVES

3000°F - RESBOND 908

Electrically Resistant - Thermally Conductive

New, High Purity, Alumina based adhesive incorporates a unique, catalytic curing system.

Just mix the adhesive and it's activator to form a readily dispensable, smooth, creamy paste.

It will not clog delicate dispensing needles and is suitable for any application requiring micro drops and/or several ounces.

Resbond 908 has excellent electrical resistance, moisture resistance and thermal conductivity.

Applications include bonding, potting and encapsulating delicate electronic assembles, sensors, instruments and general purpose high temp. applications.

Resbond 908 will become water insoluble after use at temperatures of $250^{\circ}F$ - $300^{\circ}F$. It will satisfy many difficult application requirements and is ideal for many critical, electronic applications.

Users Report:

 908 Successfully filled a long tubular probe, providing long term electrical isolation and moisture proofing a electronic sensor.

3250°F - RESBOND 903HP Bonds Dense Hi Strength Ceramics

Resbond 903HP is a ultra high temperature, Alumina adhesive.

Usable to 3250°F continuously.

Developed for high strength bonding of any combination of dense non-porous ceramics, glass and or non-reactive metals.

903HP is a smooth, creamy paste that can be brushed, troweled or sprayed on.

Resistant to liquid metals, oxidizing and reducing atmospheres, most chemicals and solvents.

Resbond 903HP has excellent electrical properties.

Handling strength is obtained, after an initial cure at 250° F. A complete cure occurs in 1 hour at $600\text{-}700^{\circ}$ F.

Users Report:

- \bullet 903HP Bonds thermocouples to high alloy steel and withstands repeated thermal cycling from -100°F to 500°F.
- Was easily sprayed onto stainless steel to form a dielectric layer for an industrial heater, used at 1400°F.

3000°F - DURABOND 7031 Alumina Hi Strength Putty

Durabond 7031 is a 3000°F, Putty that was specially formulated with high purity, Aluminum Oxide.

Provides excellent resistance to corrosion, erosion, electricity, most chemicals and solvents.

7031 is a smooth, creamy putty that is easy to apply.

Can be used to 3000°F continuously.

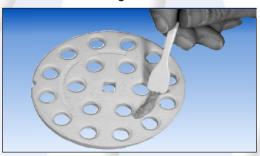
Durabond 7031 cures in 24 hours at room temp. or in 2 hours at 250 $^{\rm o}{\rm F}$

Available in syringes or standard caulking cartridges.





903HP Bonds a High Strength Ceramic Fitting for use at 2650°F



7031 Rebuilds a Worn Ceramic Part for use to 2800°F

Resbond	903 HP	908	7031
Continuous Use Temp.	°F 3250	3000	3000
Base	Al ₂ O ₃	Al ₂ O ₃	Al ₂ O ₃
Compressive Strength (psi	7000	3000	2800
Flexural Strength (psi)	3500	1100	1000
Thermal Expansion (x10 ⁻⁶ /	PF) 4.0	4.5	4.5
Thermal Conductivity*	40	15	17
Dielectric Strength (volts/m	il) 250	200	175
Volume Resistivity (ohm-cr	n) 10 ¹⁰	10 ¹⁰	10 ⁸
Components	1	2	1
Color	White	White	White
Consistency	Paint	Paste	Putty
Cure Temp.	600°F	R.T.	R.T.

BTU in / Hr °F Ft²

Resbond 903HP-1..... Pint Resbond 903HP-2..... Quar

Resbond 903HP-3..... Thinner (Pint)

Resbond 908-1..........Pint Resbond 908-2......Quart

Durabond 7031-1......4 oz Dispenser Tube Durabond 7031-2......11 oz Caulking Cartridge