## SPECIALTY HIGH TEMP. ADHESIVES

Nylon Bonder - Sterilizable - Low Expansion

#### 400°F - BOND-IT™ 7050

#### **Super Nylon Bonder**

Bond-IT 7050 is an activated epoxy that incorporates adhesion promoters right into the epoxy's backbone structure permanently improving the epoxy's adhesion and bond strength.

Adheres to most plastic surfaces producing bonds that are in many cases, stronger than the plastic substrates themselves.

Bonds combinations of dissimilar materials including metals, ceramics, plastics, glass, etc, and cures at room temperature.

**Users Report:** 

 7050 bonds nylong to aluminum housings with the bond strength required for a high performance lighting fixture.

Bond-IT is packaged in easy to use dispenser kits making it ideal to have in any shop, lab or production facility.

| Cat. No.       | Description   |
|----------------|---------------|
| Bond-IT 7050-1 | Dispenser Kit |
| Bond-IT 7050-2 | Pint Kit      |

## 500°F - RESBOND™ S5H13

#### **Hot Sterilizable**

Resbond S5H13 is a unique epoxy that after a simple room temperature cure can assemble, bond and insulate stainless steel, metals, glass and ceramic components for use up to 500°F.

Specially formulated to resist the severe conditions that are encountered during repeated hot sterilization as required for various medical applications. It is resistant to most common chemicals and solvents.

**Users Report:** 

 Resbond S5H13 seals Bi-Polar, Electro- Cauterizers and withstands thousands of successful sterilization cycles at 375°F.

S5H13 is commonly used for high performance bonding, assembling, potting, sealing, coatings and repairs in instruments, devices, equipment, etc..

| Cat. No.      | Description |
|---------------|-------------|
| Resbond S5H13 | Pint Kit    |
| Resbond S5H13 | Gallon Kit  |

# 500°F - DURALCO™ 4463

#### **Low Expansion Adhesive & Potting**

Duralco 4463 is a low expansion, 500°F, room temperature curing adhesive and potting compound

Bonds to most glass, ceramics, metals, plastics, etc.

Use this unique system for high performance bonding and encapsulation applications.

Low expansion is a must in many electronic, optical and fiberoptic applications. 4463 offers strength, high temperature stability, thermal shock resistance, chemical resistance and low shrinkage.

| Cat. No.       | Description |
|----------------|-------------|
| Duralco 4463-1 | ½ Pint Kit  |
| Duralco 4463-2 | Pint Kit    |



Bond-IT 7050 Bonds Quartz Lamp into a Plastic Holder



Resbond S5H13 Seals Bi-Polar Electro-Cauterizers

|  | 7050             | S5H13            | 4463             |
|--|------------------|------------------|------------------|
| Maximum Temp                                 | 450°F            | 500°F            | 500°F            |
| Components - Color                           | 2-Black          | 2-Black          | 2-Gray           |
| Mixed Viscosity (cps)                        | 10,000           | 12,000           | 176,000          |
| Mixed Density (gm/cc)                        | 1.30             | 1.9 gms/cc       | 1.50             |
| Hardness (Shore D)                           | 70               | 85               | 75               |
| Tensile Strength (psi)                       | 5,000            | 10,000           | 7000             |
| Thermal Cond (BTU-in/Hr. Ft <sup>2</sup> °F) | 4.50             | 13               | 5.00             |
| Thermal Expansion (x 10 <sup>-5</sup> /°C)   | 4.80             | 3.30             | 2.00             |
| Dielectric Strength (volts/mil.)             | 400              | 500              | 600              |
| Volume Resistivity (ohm-cm)                  | 10 <sup>14</sup> | 10 <sup>15</sup> | 10 <sup>14</sup> |
| Heat Distortion (°C)                         | 75               | 210              | 210              |
| Elongation (%)                               | 3                | 2                | 2                |
| Thermal Stability<br>(% 1000 hr. @ 200°C)    | 0.50             | 0.50             | 0.50             |
| Shrinkage (% max)                            | 0.80             | 0.20             | 0.50             |
| Moisture Absorption (% 30 Days)              | 0.20             | 0.20             | 0.30             |
| Mix Ratio (R/H)                              | 100/10           | 100/13           | 100/6            |
| Cure (Hr. @ Room Temp.)                      | 4-16*            | 16-24*           | 4 -16*           |
| Cure (Hr. @ High Temp.)                      | 1-2<br>@ 200°F   | 1-2<br>@ 250°F   | 1-2<br>@ 250°F   |

\* Cures can be accelerated with mild heat

For Epox-EEZ Pre-Measured Kits (See Page 19.)