# SPECIALTY HIGH TEMP. ADHESIVES

# Nylon Bonder - Sterilizable - Low Expansion

## 400°F - BOND-IT™ 7050

#### **Super Nylon Bonder**

Bond-IT<sup>™</sup> 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<sup>™</sup> 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.		Descri	iption
$Resbond^{{\scriptscriptstyle TM}}$	S5H13-1	.Pint K	it
$Resbond^{{\scriptscriptstyle TM}}$	S5H13-2	.Gallor	ı Kit

# 500°F - DURALCO™ 4463

### Low Expansion Adhesive & Potting

Duralco<sup>™</sup> 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** 

Physical Properties	7050	S5H13	4463
Max. Use Temperature	450°F	500°F	500°F
Components (Color)	2-Black	2-Black	2-Gray
Mixed Viscosity (cps)	5,000	12,000	176,000
Mixed Density (gms/cc)	1.3	1.90	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)	4.5	13	3.54
Thermal Expansion (x 10 <sup>-5</sup> /°C)	4.8	3.3	2.0
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 (% 1000/hr. @ 200°C)	0.5	0.5	0.5
Shrinkage (% max)	0.8	0.2	0.5
Moisture Absorption (% 30 Days)	0.2	0.2	0.3
Mix Ratio (R/H)	100:10	100:13	100:6
Cure (Hr. @ Room Temp.)	4-16*	16-24*	4-16*
Cure (Hr. @ High Temp.)	10 Min. @ 250°F	1-2 @ 250°F	1-2 @ 250°F

Cures can be accelerated with mild heat