# 500°F ROOM TEMP CURING, LOW VISCOSITY EPOXY

**Bonds, Coats, Seals and Protects** 

## 500°F - DURALCO™ 4461

**Ultra Thin Bond Lines** 

**Seals Porous Materials** 

**Impregnates Fine Structures** 

Forms Protective Coatings

Duralco Low Viscosity Adhesives are formulated with Cotronics' unique polymer system to provide the ultimate in high temperature chemical, electrical and moisture resistance.

They are user friendly, 100% solid formulations.

No volatiles. No VOC's. No harsh odors.

Duralco<sup> $\infty$ </sup> 4461 is a free flowing, liquid adhesive that is ideal for forming ultra thin bond lines, impregnating, coating and encapsulating applications.

Has excellent adhesion to metals, plastics, ceramics, glass, etc. Cures at room temperature to provide chemical, solvent and corrosion resistance in any high temp. application.

Can be used up to 500°F as a protective coating for coils, filament windings, electronics, etc.

It is an ideal choice for high temperature applications in electronics, optics, instrumentation, etc.

#### **Users Report:**

Fiber Optic Cables consisting of 3,000 glass strands were encapsulated, and bonded with 4461 in a 1/8" stainless steel tube. The low viscosity of 4461 enabled full penetration in and around the fiber stands.

4461 Bonds optical components and protects them from moisture absorption and transmission.

4461 Pots a transformer for high temperature service.

## Availability:

Cat. No.	Description	Temp.	Price
Duralco 4461-1	Pint Kit	500 °E	147.27
Duralco 4461-2	Gallon Kit	500 °F	488.56
<b>Duralco 4461IP-1</b>	Pint Kit	500 °F	140.24
Duralco 4461IP-2	Gallon Kit	500 °F	484.36

### 4461SS, New, Slow Setting Version

Ideal for large volume potting and casting applications.

Dura	ilco 44	61SS-1	Pint 7	Frial Kit	500	°F	138.93
Dura	ilco 44	61SS-2	Gallo	n Kit	500	°F	530.69

#### **Pre-Measured Kits**

Each Unit Contains: 1 jar of resin, 1 syringe of hardener and 1 mixing stick. (See page 19 for details)

EE4461-1010	Epox-Eez 10gm units/box	134.30
EE4461-2510	Epox-Eez 25gm units/box	149.56
EE4461IP-1010	Epox-Eez 10gm units/box	126.39
EE4461IP-2510	Epox-Eez 25gm units/box	146.78



4461 Penetrates and Encapsulates
A Semi-Conductor Device



4461 Bonds an Optical Component



4461 Potting a Transformer for High Temp. Use

ior night temp. Use					
Duralco™	4461	4461IP			
Maximum Temperature	500°F	500°F			
Components (Color)	2-Amber	2-Amber			
Mixed Density (gm/cc)	1.1	1.1			
Mixed Viscosity (cps)	3,600	4,800			
Hardness (Shore D)	90	90			
Tensile Strength (psi)	9,500	10,350			
Thermal Conductivity (BTU-in/Hr. Ft <sup>2</sup> °F)	1.47	1.47			
Thermal Expansion (10 <sup>-5</sup> /°C)	5.4	5.4			
Dielectric Strength (volts/mil.)	450	425			
Volume Resistivity (ohm-cm)	10 <sup>13</sup>	10 <sup>13</sup>			
Heat Distortion (°C)	210	210			
Elongation (%)	5	5			
Thermal Stability (% 1000/hrs. @ 200°C)	0.2	0.2			
Shrinkage (% max.)	0.8	0.8			
Moisture Absorption (% 30 Days)	0.15	0.15			
Mix Ratio (R/H)	100:17	100:25			
Cure (Hrs. @ R.T.)	16-24*	16-24*			
Optimum properties post cure Hrs. @ 250°F	5	1			
and Hrs. @ 350°F	1	1			

\* Cures can be accelerated with mild heat