

# 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 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:

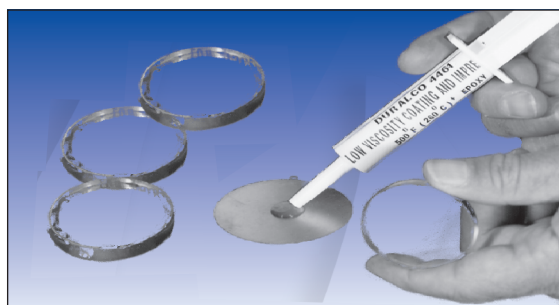
Fiber Optic Cables consisting of 3,000 glass strands were encapsulated, and bonded with 4461 in a 1/8" stainless steel tube. The low viscosity of 4461 enabled full penetration in and around the fiber stands.

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

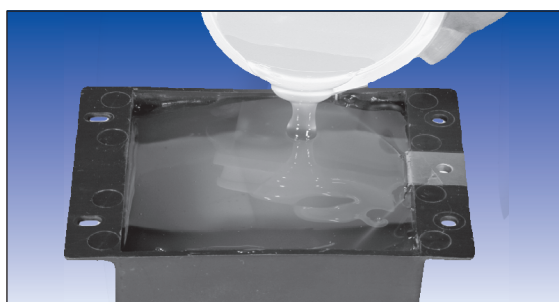
4461 Pots a transformer for high temperature service.



**4461 Penetrates and Encapsulates  
A Semi-Conductor Device**



**4461 Bonds an Optical Component**



**4461 Potting a Transformer  
for High Temp. Use**

### Availability:

Cat. No.	Description	Temp.
Duralco 4461-1.....	Pint Kit .....	500 °F
Duralco 4461-2.....	Gallon Kit .....	500 °F
Duralco 4461IP-1.....	Pint Kit .....	500 °F
Duralco 4461IP-2.....	Gallon Kit .....	500 °F

### 4461SS, New, Slow Setting Version

*Ideal for large volume potting and casting applications.*

Duralco 4461SS-1.....	Pint Trial Kit .....	500 °F
Duralco 4461SS-2.....	Gallon Kit .....	500 °F

### Pre-Measured Kits

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

EE4461-10.....	10 Epox-Eez 10gm units/box
EE4461-25.....	10 Epox-Eez 25gm units/box
EE4461IP-10.....	10 Epox-Eez 10gm units/box
EE4461IP-25.....	10 Epox-Eez 25gm units/box

Duralco™ Maximum Temp	4461 500°F	4461IP 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)	85-95	90
Tensile Strength (psi)	9,500	10,350
Thermal Conductivity (BTU-in/Hr. Ft <sup>2</sup> -°F)	4	4
Thermal Expansion(10 <sup>-5</sup> /°C)	5.40	5.40
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)	0.20	0.20
Shrinkage (% max.)	0.80	0.80
Moisture Absorption (% 30 Days)	0.15	0.15
Mix Ratio (R/H)	100/17	100/25
Cure (Hr. @ R.T.)	16-24*	16-24*
Optimum properties post cure hrs. @ 250°F	1	1
and hrs. @ 350°F	1	1

\* Cures can be accelerated with mild heat.