# 500°F ELECTRICALLY RESISTANT EPOXY

Cures at Room Temp. to Bond, Pot, Seal and Protect

## 500°F - DURALCO™ 4525 & 4525IP

Easy to use. Just mix and apply.

No volatiles. No solvents. No out-gassing.

Duralco™ 4525 cures at room temp. (or in 5 minutes at 250°F) to provide high bond strength, high temp. stability, low shrinkage, excellent chemical, electrical and radiation resistance and low moisture absorption.

It maintains its high electrical resistance over long periods of time and has the lowest moisture absorption available when compared to 23 commercially available epoxies. (This application has been approved by UL).

Duralco™ 4525 is ideal for high performance bonding, potting, sealing, repairs, castings and jigs. Forms protective coatings. Commonly found in electronics, appliances, instrumentation, motors, equipment, etc.



#### **High Resistance Even in High Humidity**

Used to seal thermocouples, electric heaters and critical electronic components for use in high humidity environments. Tests show less than 10% of the moisture transmission of silicones or competitive epoxies.

#### **Proven in Instrumentation Applications**

Used for fabrication of end seals and installation of thermocouples, pressure, strain gauges and flow measuring instruments.

### **Excellent Corrosion Resistance**

Used to repair glass lined tanks for use in 36% Hydrochloric, 29% Phosphoric, 65% Sulfuric and 70% Nitric Acids, 25% Caustic, 30% Chrome Oxide solutions. Competitive epoxies disintegrated in less than 24 hours.

## Bonds Carbon to Steel and Remains in use for 5 years

Used to bond carbon blocks to steel for bearings in a rotating kiln at 300°F. Bonds brake pads.

## **Fast Cures**

Independent tests have shown 95% cure in 15 minutes at 200°F and 100% cure in 5 minutes at 250°F, enabling high speed production applications.

#### Availability:

Cat. No.	Description	Temp.
Duralco™ 4525-1	Pint Kit	500°F
Duralco™ 4525-2	Gallon Kit	500°F
Duralco™ 4525IP-1	Pint Kit	500°F
Duralco™ 4525IP-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)

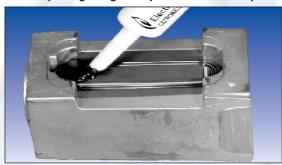
EE4525-10	10 Epox-Eez 10gm units/box
EE4525-25	10 Epox-Eez 25gm units/box
EE4525IP-10	10 Epox-Eez 10gm units/box
EE4525IP-25	10 Epox-Eez 25gm units/box

Also Available in Epox-Eez Twin Pack Cartridges

Quantity Prices & Custom Formulations Available Upon Request



4525 Bonds a 316 S.S. Shaft to a Ceramic Piston Repairing a High Temperature Acid Pump



Duralco™ 4525 Insulates, Seals and Moisture-Proofs a Hi- Temp Instrument



Duralco 4525™ Bonds a Hi-Temp. Brake Assembly

Duralco™	4525	4525IP
Maximum Temperature	500°F	500°F
Components - Color	2-Black	2-Black
Mixed Density (gms/cc)	1.7	1.9
Mixed Viscosity (cps)	12,400	24,000
Hardness (Shore D)	90	90
Tensile Strength (psi)	10,000	10,000
Thermal Cond.(BTU-in/Hr. Ft <sup>2</sup> °F)	13	3.76
Thermal Expansion (10 <sup>-5</sup> /°C)	3.3	3.1
Dielectric Strength (volts/mil.)	450	425
Volume Resistivity (ohm-cm)	10 <sup>15</sup>	10 <sup>15</sup>
Heat Distortion (°C)	210	213
Elongation (%)	2	2
Thermal Stability (% 1000 hr @ 200°C)	0.05	0.05
Shrinkage (% max.)	0.2	0.2
Moisture Absorption (% 30 days)	0.1	0.2
Mix Ratio (R/H)	100:8	100:8-12
Cure (Hr. @ 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.