

# 600°F THERMALLY CONDUCTIVE ADHESIVES

## For Electrical and Industrial Applications

Duralco Thermally Conductive adhesives and potting compounds provide the heat dissipation required for many High Temperature Electronic and Industrial applications.

These ultra temp. adhesives combine Cotronics' unique polymer system and special thermally conductive fillers to provide continuous service up to 650°F.

Duralco Conductive Adhesives have excellent adhesion to glass, ceramics, metals and plastics.

Resistant to most chemicals and solvents.

They are ideal for all high temperature applications.

### Applications Include:

- Removing the heat generated in many electronic applications including semi-conductors, rectifiers, high power devices, etc.
- Heat transfer applications, including bonding copper coils to reaction vessels for heating and or cooling. Heat tracing adhesive. etc.
- Fabrication of heated, plastic forming tools and molds.

Duralco™	128	132	133	134	135
Major Constituent	Ceramic	Aluminum	Aluminum	Ceramic	Aluminum
<b>Features</b>	Hi Electrical Resistance	Hi Thermal Conductivity	High Temperature	Electrically Resistant Grease	Thermally Conductive Grease
Max. Temperature °F	500	500	600	500	500
Volume Resistance (ohm-cm.)	10 <sup>15</sup>	10 <sup>6</sup>	10 <sup>6</sup>	10 <sup>16</sup>	N. A.
Thermal Conductivity (BTU in/°F hr Ft <sup>2</sup> )	30	40	40	35	40
Viscosity (cps)	15,000	36,500	36,500	Grease	Grease
Color	Tan	Silver	Silver	Tan	Gray
No. of Components	2	2	2	1	1
Mix Ratio	100/21	100/27.3	100/30	N. A.	N. A.
Cure Cycle (Hrs. @ 75°F)	16 - 24	16 - 24	4 hrs. @ 250	N. A.	N. A.
Cure Cycle (Mins. @ 250°F)	20	5	240	N. A.	N. A.



**Duralco 132 Dissipates Heat in a Semiconductor Device**

### Duralco 128 - 500°F Ceramic Based

Duralco 128 is highly thermally conductive, electrically resistant adhesive and potting compound.

The ceramic fillers are carefully chosen to provide high thermal conductivity and high dielectric strength.

Just mix the resin and hardener, apply and cure at room temp. Curing may be accelerated with mild heat.

### Duralco 132 - 500°F Aluminum Based

Duralco 132 is an Aluminum Metal Filled Epoxy that cures at room temperature to form machinable, thermally conductive bond lines.

Duralco 132 provides the maximum heat transfer available in a 500°F epoxy system.

Can be supplied as a non-sag putty, Duralco 132P, for heat tracing applications.

**Users report** 132 bonds copper coils to vessels for rapid heating and cooling in a critical chemical process.

Used for bonding, assembling and heat tacking applications.

Cat. No.	Size	Temp.
Duralco 128 . . . . .	8 oz. . . . .	500°F
Duralco 132 . . . . .	16 oz. . . . .	500°F
Duralco 132P . . . . .	8 oz. . . . .	500°F
Duralco 133 . . . . .	16 oz. . . . .	600°F
Duralco 134 . . . . .	8 oz. . . . .	500°F
Duralco 135 . . . . .	4 oz. . . . .	500°F
Duralco 135 . . . . .	8 oz. . . . .	500°F

*Quantity Prices, Special Packing on Request*

### Duralco 133 - 600°F Aluminum Based

Duralco 133 is a two component, heat curing, Aluminum Filled, Conductive Epoxy.

Duralco 133 combines the excellent properties of Duralco 132 with Cotronics' higher temp. epoxy systems making it suitable for applications requiring up to 600°F service.

Cures with mild heat to form thermally conductive bondlines and heat transfer medium.

Duralco 133 is suitable for high temperature tooling. It is readily machinable and ideal for all kinds of repairs and as a construction material.

### Duralco 134 - 500°F Ceramic Based Grease

Duralco 134 thermally conductive grease, is a non-hardening, electrically insulating and thermally conductive grease. It is ideal for use between components and heat sinks.

Users Report Duralco 134 replaced silicone based grease in manufacturing of high end digital cameras.

Duralco 134 retains its paste like consistency, enabling parts to be easily removed and replaced. Will not dry out even after long periods of time. Usable to 500°F.

### Duralco 135 - 500°F Aluminum Based Grease

Duralco 135 is filled with an ultra fine, aluminum metal powder to provide the maximum possible heat transfer rate in a non hardening grease.

Used in delicate military applications where excess heat build up can cause serious failures.

Duralco 135 is commonly used in many industrial applications where electrical resistance is not critical.