



## ***ADHESIVES***

Dynalloy's conductive adhesives are all two component epoxy based systems that when combined produce a manageable product ideal for many applications. Dynalloy offers both pure silver filled products and lower-cost silver coated or nickel filled products. These adhesives are recommended for connecting heat sensitive components to printed circuit boards and connecting ground wires to components. Dynalloy adhesives are excellent replacements for metallic solder where lead usage is prohibited or temperature constraints are present. These products are also recommended for shielding, bonding wave guide plumbing in hybrid circuit assembly, and as a plating base. These adhesives are used extensively in the repair of printed circuits.

## ***COATINGS***

Developments in the plastics industry include several different types of engineering plastics that are used in the manufacture of enclosures, cabinets and housings replacing the use of metals. These materials along with structural foam are all transparent to radio frequency and need to be treated to make them conductive. Uncontrolled interference can cause memory erasure, navigational errors in marine and aircraft equipment, jammed radio reception and failures in medical equipment. There is a greater need now for conductive paints and coatings for EMI/RFI shielding than in the past, and use should increase in the future. Most of Dynalloy's coatings are silver filled. Silver is a highly conductive metal with excellent corrosion resistance. While the cost is high, EMI/RFI shielding attenuation is excellent. Silver coatings are specified for military applications where electromagnetic protection and radio frequency interference protection is required. Dynalloy also offers lower-cost silver-coated and nickel filled coatings as well. Dynalloy's conductive coatings can be used for electroplating base, component grounding, printed circuit repair, capacitor coating and lead terminations. The most popular use for these coatings is in EMI/RFI shielding.

## ***LUBRICANTS***

Dynalloy has developed silver alloy filled electrically conductive, high quality lubricants for a variety of applications. These products are excellent for lubricating hinge joint switches and air blast breakers. They will eliminate hot spots and help prevent overheating of knife blade switches. In addition, they can be used for making non-permanent electrical connections and as a caulking compound for shielding. They can be applied in the same manner as a conventional lubricant.

## ***MATERIAL USES***

- ❖ Connecting Heat Sensitive Components
- ❖ Connecting Ground Wires
- ❖ Metallic Solder Replacement
- ❖ Bonding Wave Guide Plumbing
- ❖ EMI/RFI Shielding
- ❖ Printed Circuit Repair
- ❖ Capacitor Coating
- ❖ Lead Terminations
- ❖ Plating Base
- ❖ Temporary Connections

# Product Table

| <i><b>Electrically Conductive Adhesives</b></i>  |   |
|--|---|
| Dynaloy 325                                      | Two component pure silver filled epoxy that combines the excellent adhesive properties of an epoxy with the excellent electrical and thermal conductivity of pure silver. Easy 1:1 mixing ratio. Up to two-hour pot life after mixing. This product is approved by NASA and has been used for Apollo Moon Missions.   |
| Dynaloy 336                                      | Low cost two component silver filled epoxy alloy that has the strong adhesive properties of an epoxy together with excellent electrical conductivity. Unlike copper or carbon extended conductive epoxies, Dynaloy 336 does not contain either of these elements which can cause drift, migration or galvanic attack in contact with electrolytes. Easy 1:1 mixing ratio. |
| Dynaloy 536                                      | Low cost two component silver coated, copper filled epoxy with excellent adhesive properties and good conductivity. The passivated copper is not reactive in the organic vehicle and thereby exhibits good storage stability. It is highly stable in the applied film ensuring that the good conductivity of the coating is maintained during service.                    |
| Dynaloy 1931                                     | Two component pure silver filled epoxy adhesive system that provides excellent adhesion and both thermal and electrical conductivity. This product meets the requirements for Federal Specification MMM-A-1931 Type I and Type II.  |
| <i><b>Electrically Conductive Coatings</b></i>   |   |
| Dynaloy 340                                      | A pure silver filled electrically conductive acrylic paint. Dynaloy 340 sets by solvent evaporation similar to most good lacquer systems.   |
| Dynaloy 342                                      | Same as Dynaloy 340, but with a different solvent system.   |
| Dynaloy 350                                      | Solderable, conductive polymer alloy coating. May be soldered to with tin/lead solders containing 1-2% silver. Provides excellent adhesion, conductivity and good heat resistance.  |
| Dynaloy 352                                      | Same as Dynaloy 350, but with a different solvent system.   |
| Dynaloy 370                                      | A pure silver filled electrically conductive urethane paint, which produces an extremely flexible coating. Dynaloy 370 meets Naval Sea Command Drawing 5335279.   |
| Dynaloy 479                                      | Solderable low cost conductive silver alloy polymer coating. A lower cost silver alloy is used in place of pure silver.   |
| <i><b>Electrically Conductive Lubricants</b></i> |   |
| Dynaloy 495                                      | A silver alloy silicone lubricant. Non-volatile, non-drying, no mixing required. Stable from 165°C to 225°C.  |
| Dynaloy 495-1                                    | Similar to 495, but made with a solvent base creating a thinner version.  |