



TECHNICAL DATA SHEET

AG-610 SILVER CONDUCTIVE INK

AG-610 is designed for applications requiring fast drying at room temperature or moderate temperatures

DESCRIPTION

- Fast drying, silver filled, electrically conductive ink
- Can be thinned with solvent for spraying or dipping and can be applied by syringe or other dispensing methods
- Extremely tough, scuff resistant, crease resistant and has excellent adhesion to polyester, polyimide and most other polymer substrates as well as metal surfaces
- Excellent for making repairs to circuit traces or jumpers
- Compatible with our UV curable dielectrics, all of our conductive epoxy adhesives and our UV curable component encapsulants and conformal coatings

AG-610 is not recommended for screen, pad, gravure or flexographic printing due to its fast drying characteristics.

TYPICAL PROPERTIES

Appearance	Thixotropic silver colored paste
Viscosity: Brookfield SC4-21 spindle 20 shear	<200 cps
Thixotropic Ratio	1
Drying Schedule	3 to 5 minutes at room temperature or dried by forced air
Total % NV Solids	60% ± 2%
Hegman Gauge	<50.0 μ
Surface Resistivity	< .070 Ω/square/mil
Shelf Life	6 months in unopened container

AG-610 SILVER CONDUCTIVE INK

Application Guidelines

Always mix ink thoroughly before using and during, as silver will settle quickly. Continuous agitation during application is recommended. If silver settles to a hard pack in container, then aggressive mixing is required to break up the silver chunks and redisperse them in the liquid.

Thinning & Cleanup

Use MEK or other suitable solvents. If faster drying time is required, contact Applied Ink Solutions for solvent recommendations. If solvent based inks are left on screens for any length of time, the ink will gradually thicken as solvent evaporates. If ink is to be left on an inactive press for any length of time, solvent evaporation can be minimized by pooling the ink into a small area instead of leaving it spread out over a large area. Pooling the ink reduces the surface area, thus slowing the drying process. Always check the viscosity of ink that has been recovered from a screen and add small amounts of solvent while mixing thoroughly to restore viscosity. Solvent can be added to reclaim thickened ink as long as the ink has not dried and hardened completely.

Drying

It is essential that all residual solvent be removed from this ink once it is applied. Incomplete drying will cause the ink to appear dry on the surface while trapping solvent underneath the surface. Over time, this trapped solvent will migrate out of the ink, and can cause adhesion problems with any material (such as dielectrics) applied over the ink.

Completeness of Drying

Evaluate the point-to-point resistance along one of the screened conductive paths after one pass through the drying oven or one cycle in a batch-drying oven. Run the substrate through another drying cycle. Measure the point-to-point resistance again along the same path and compare it to the original reading. If the resistance decreases by less than 10%, then the ink is essentially dry after the first drying cycle or pass through the oven. If the resistance decreases by more than 10%, then more drying time is required to completely remove the solvent.

Health & Safety

Products manufactured by Applied Ink Solutions are intended for use in an industrial environment by trained personnel. Please follow proper health/safety processes regarding storage, handling and processing of the products.

Guidelines are intended to provide a starting point for evaluation. Applied Ink Solutions recognizes that each customer's manufacturing process is unique, and we are available to provide technical assistance to resolve your processing issues. Call us to discuss your application in more detail.

The properties are accurate to the best of our knowledge and Applied Ink Solutions makes no guarantees for customer specifications established in applications where this product is used. Customer assumes responsibility for determining fitness of use in their particular application.