

TECHNICAL DATA SHEET

AG-515-1 SILVER CONDUCTIVE INK

TYPICAL PROPERTIES

Appearance	Silver liquid
Total % NV Solids	57.5 - 61%
Hegman Gauge	<10.0 μm
Surface Resistivity	< .015 $\Omega/\text{square}/\text{mil}$
Shelf Life	6 months in unopened container

PRODUCT FEATURES

- Silver-filled, electrically conductive ink or coating designed for spraying, dipping & slot die coating
- Can be thinned with solvent for spraying, dipping or slot die coating or EMI/RFI shielding applications
- Long open time to reduce nozzle clogging
- Extremely tough, scuff resistant, crease resistant
- Excellent adhesion to polyester, polyimide and most other substrates
- Compatible with our UV curable dielectrics, all of our conductive epoxy adhesives and our UV curable component encapsulants

DRYING SCHEDULE

30 minutes at 130°C, dependent on oven configuration and air flow, are suggested baseline conditions. It is recommended that process optimization be used for each application and substrate type.

MIXING

AG-515-1 will thicken when it is stored in sealed containers over a period of time. It is essential to mix the material thoroughly before use to redisperse any settled silver particles and to return the ink to a more desirable viscosity.

STORAGE AND SHELF LIFE

Shelf life is 6 months in unopened container, if stored in a dry area at 25°C (room temperature). Do not use product after the expiration date.

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CLEANUP & THINNING

Use Solvent 20 for thinning and cleanup. For other solvent recommendations, contact your Kayaku Advanced Materials sales representative. Solvent can be added to reclaim thickened ink as long as the ink has not dried and hardened completely. Do not store used ink in the same container as unused ink.

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.

Evaluate the point-to-point resistance along one of the 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.

HANDLING

Consult Safety Data Sheet (SDS) for details on the handling procedures and product hazards prior to use. If you have any questions regarding handling precautions or product hazards, please email productsafety@kayakuAM.com.

DISPOSAL

The material and its container must be disposed in accordance with all local, state, federal and/or international regulations.

DISCLAIMER

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