

Technical Data Sheet

Colloidal Silver Liquid

#12630

EMS Silver Liquid is a unique air-drying silver used to convert a variety of surfaces, such as those electrically and thermally non-conductive to conductive for many application purposes. These silver liquids may be utilized during circuit repair processes or as RF shielding materials. During the application process, whether the user wishes to brush, spray, or dip the silver liquid, the material will harden immediately as the solvent begins to evaporate. We suggest that for optimal results across electrical and mechanical applications, the user cures the silver liquid at room temperature for approximately 16-20 hours or at 120-200°C for 30 minutes. The use of a heat gun is recommended to facilitate this curing process. Depending on the application of choice, one may consider applying additional layers of the silver liquid in order to reach an increased level of conductivity.

Key benefits

- Item includes brush applicator
- Resistant to solvents
- Cures at room temperature
- Adheres to a variety of materials
- Electrically and thermally conductive

Protocol

- Preparation of surfaces prior to application is optional, though not required
- Materials adhere to the following surfaces: boards that are polymer-based (phenolic), glasses, metals, ceramics, fiberglass, and many plastics

Specifications

Curing conditions	Hardens instantaneously as the solvent evaporates
% Solids	60% ± 1% Ag
Sheet resistance	0.02-0.05 ohms/sq/mil (25µm)
Thinner	Catalog #12641 Silver Colloidal Extender
Shelf life	6 months; for long-lasting results we highly recommend that the jar be rolled at 1-6 rev/hr. Note: Exposure to extreme temperatures is inadvisable in all circumstances.
Storage	Store the Liquid Silver in a dry location (we recommend between 5-30°C). Before use, make sure that the product is at room temperature. The product must be mixed completely to provide equal consistency.