



POLYCHEM

UV/EB INTERNATIONAL CORP.

Thermo-Setting Expandable Conductive Silver Adhesive

Experimental Product

Product Code: Expandable Conductive Silver Adhesive #121608-1

Description:

This silver conductive adhesive is a two-component system, 100% solid content. It expands when heated and then forms a high strength conductive foam. It can fill out the gap between electrodes and space when heated. It provides excellent electric conductivity, aging resistance and fast cure speed at lower temperature. It also has excellent long-term heat resistance up to 120C and 170C for short term.

Specifications:

Appearance:

Component A: silver paste

Viscosity: (@ 30 C, 10 rpm Brookfield #52 Spindle): 13,500 cps

Component B (hardener): dark brown liquid

Viscosity: (@ 30 C, 10 rpm Brookfield #52 Spindle): 500 cps

Pot life (after component A and B are mixed): 10 min.

Expansion Ratio: approx. 50%- 150% (higher heating temperature increases expansion ratio)



Photo 1. Original Adhesive #121608-1



Photo 2. Adhesive #121608-1 after Heated

Applicable Substrate: PET, PVC, glass, metals, etc.

Instructions:

- 1). Mixing the silver paste (Component A) thoroughly.
- 2). Take out a needed amount of component A (silver paste) and add its 7% weight of component B (hardener).
- 3). Make sure the surface of the substrates is clean to ensure adhesion strength and conductivity.
- 4). Mixing Component A (silver paste) and Component B (hardener) thoroughly before use.
- 5). Pot life after mixing these two components is about 30 min. No thinner (solvent) shall be added.

Electric Properties after Cured:

Bulk Resistivity: 0.00005 Ω .cm

Surface Resistivity: 0.03 Ω /square

Note: The above numbers are the typical values and are not specifications. Electric conductivity is influenced by heating temperature and expansion ratio.

Suggested Curing Conditions: Substrate temperature 110C to 130 C x 20 minutes

Clean Up Method:

Un-cured or partially cured adhesive can be cleaned up by acetone, ethyl alcohol, or isopropyl alcohol. The adhesive system is low irritation to skin. If contacted with skin, use soap and flush with water.

Package: 500 grams, 1,000 grams /set, including Component B (hardener)

Shelf life: 6 months from the date of manufacturing

Recommend Storage Conditions: Stored in a dark and cool place. Always keep caps closed.

Polychem UV/EB International Corp. (Taipei, Taiwan)

Tel :+886- 2- 2876-2561 E-mail: polychem@ms4.hinet.net Fax:+886- 2- 2874-2646

Website: <http://polychem.tw/>