

Product Description

Dycotec DM-ADH-11001S is a screen printable epoxy adhesive that is used for general printed electronics applications. The paste is also compatible with syringe application.

Product Benefits

- Screen printable
- Long screen residence time > 8 hours
- Good adhesion (>8 Kg/cm²)
- Solvent free
- Use on substrates such as PET and glass

Paste Preparation

DM-ADH-11001S is a single part adhesive system. Gently stir the paste before use to ensure the product is well mixed. Avoid rapid stirring to prevent air entrapment during the stirring process.

Properties of Uncured Paste

| Test | Properties |
|---|------------|
| Viscosity after mixing (Pa.s) <i>(Lamy, cone and plate 50s⁻¹, 20°C)</i> | 4-10 |
| Solids Content | 100 % |
| Solvent | 0% |

Paste Processing Conditions

The paste can be cured typically using a convection oven. Typical curing parameters used are pre-cure of the printed parts for 15 mins at 110°C. Assemble the pre-cured parts for final cure to create adhesion between the layers. Continue the curing at 120 for 30 mins followed by post curing at 140°C for 30 – 60 mins. Curing times may be optimised to achieve the desired adhesion depending on manufacturing process set-up.

| | |
|--------------------------------|-----------------------------------|
| Screen | 325 mesh, SS, 13 µm emulsion |
| Squeegee hardness | 80 Durometer Shore A |
| Squeegee print pressure | 5 kg |
| Holding angle | 45° |
| Blade Length | 220 mm |
| Print gap | 0.5 mm |
| Flood : Print speed | 50 mm/s : 50 mm/s (1 print cycle) |
| Print-out thickness when cured | 10 - 15 µm |

Properties of Cured Paste

| Test | Typical Properties |
|------------------------------|-----------------------|
| Pull Strength (ASTMD4541-02) | >8 Kg/cm ² |
| Pencil Hardness | 6H |

Clean-Up

Equipment can be cleaned using isopropanol alcohol or acetone.

Storage and shelf-life

Containers should be stored at room temperature (21°C) with lids tightly sealed. The paste shelf-life for an unopened container is 3 months from date of shipment. Avoid introduction of water into the paste. Dycotec Materials cannot assume responsibility for a paste that has not been stored in inappropriate conditions or where the pastes have been contaminated following use.

Safety and Handling

For safe use of this product, please review relevant material safety and datasheet (MSDS).

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All information reported in the datasheet is for experimental work undertaken in our laboratories and illustrates typical values only. Processing conditions may vary depending on customers' experience and their application requirements and manufacturing process equipment set-up.

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