



MCS-120EP

SILVER FILLED ELECTRICALLY CONDUCTIVE TWO PART EPOXY ADHESIVE

The electrically conductive properties of the MCS-120EP epoxy adhesive makes it particularly suitable for component attachment and termination in membrane keypads and other electromechanical assemblies.

Additionally as a thixotropic product with non-stringing characteristic, it is ideally suited for screen printing, dot

dispense applications and high speed dot dispense processes where curing at low temperatures is required.

Adhesion to most metal and plastic materials is excellent as its toughness and resistance to temperature with lateral component push off testing showing a 30-40% greater bond strength compared to other conductive epoxy adhesives.

| | | |
|---|----------------------|--|
| Appearance | Part 'A' Part 'B' | Silver Coloured Paste Light Yellow Coloured Liquid 100 (17) Parts 'A' to 5.9 (1) Parts 'B' 12 Months in unopened Container >60 mins dependant upon ambient conditions >12 Hours 100% <100µ 0.005 Ω-cm -55 °C to +125 °C Continuous Intermittent at higher temperatures |
| Mix Ratio (by weight) | | |
| Shelf Life (unmixed) | | |
| Pot Life | | |
| Thin Film Set Time (.001" @ 25 °C) | | |
| Total % NV Solids | | |
| Hegman Gage | | |
| Volume Resistivity, max 25 °C | | |
| Operating Temperature Range (Fully Cured) | | |

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|----------------|---|
| Printing | Screen Printing or Dot Dispense |
| Screening | Monofilament Polyester (157 to 200 Mesh) |
| Squeegee | Stainless Steel (165 to 270 Mesh) |
| Dot Dispensing | (Emulsion Thickness between .001" and .004") Polyurethane Shore 'A' durometer between 60 and 70 Positive displacement, Pneumatic or Syringes for hand held Equipment |
| Substrates | Most Metal and Plastic Substrates |
| Solvent | Not to be Thinned |

| (Time at Temperature) | Complete Cure |
|-----------------------|---------------|
| 25°C* | 24 Hours |
| 65 °C | 60 Minutes |
| 95 °C | 30 Minutes |
| 120°C | 5 Minutes |

At 90% Cure, the assembly can generally be handled carefully without the danger of damaging the adhesive bond. Adhesive will continue to cure at room temperature after removal from the oven. Cure times above are intended as guidelines and are dependent on the actual glue line being held at the given temperature.

Safety & Handling:

The following precautions should be exercised when handling:

Avoid prolonged contact with skin. If contact with skin occurs, wash immediately with soap and water

Use with adequate ventilation, avoid prolonged breathing of vapour.

Dangerous if swallowed - DO NOT CONSUME

The performance characteristics are influenced and affected by printing technique, nature of substrate, curing time, curing temperature and type of drying equipment.

Before adopting our products for commercial use, the user assumes responsibility for determining fitness of use in their particular application and process. Memcon makes no warranties and assumes no liability in connection with any use of this information.

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