Technical Data Sheet

Conductive Silver Adhesive
EA044 (Part A and Part B)

Application

EA044 is a two-part, electrically conducting, flexible epoxy with minimum shrinkage and excellent moisture resistance. EA044 was designed primarily for flexible film applications and can be screen-printed.

EA044 is formulated with a moderate viscosity and has a mix ratio of 1:1 to facilitate machine dispensing in high volume applications.

EA044 (Part A and Part B) is formulated and processed to be RoHS compliant.

Cured Film Properties

Colour:	Silver
Resistivity:	< 0.006 Ω.cm

Formulation Properties

Viscosity: Using a Brookfield HBT cone and plate viscometer at 25 °C.

Part A:	50 - 103 Pa.s at 1rpm 14 - 18 Pa.s at 10rpm
Part B:	30 - 75 Pa.s at 1rpm 15 - 22 Pa.s at 10rpm

Thixotropic Index:

Part A:	4 - 6
Part B:	1.5 - 4

Specific Gravity:

Part A:	3.5 - 5.0 g/cm^3
Part B:	3.5 - 5.0 g/cm^3

EU RoHS Directive 2011/65/EU

Processing Recommendations:

Mixing: Weigh the required amounts of Part A and Part B in the correct weight ratio. Mix thoroughly. De-airing may be required to optimize properties.

Mix Ratio:

Part A (by weight): 1
Part B (by weight): 1

Cleaning: Clean up using warm soapy water. For cleaning of equipment, removal of EA044 may be facilitated through use of a hydrocarbon solvent.

Curing: EA044 has a working life of 3 h and will achieve handling strength in 24 h. However, to gain maximum mechanical and chemical properties, it is recommended that the material is cured for 2 h at 80 °C or for 1 h at 125 °C.

Thinning: Thinning is not recommended as this paste is supplied at the appropriate viscosity for application. Contact your local Ferro Representative for appropriate solvent details, should thinning become necessary to replace solvent lost through evaporation.

Shelf Life and Storage: 6 months for Part A and Part B when stored at -20 °C. Alternatively, refrigerated storage for both parts may be used for periods of up to 1 month.

Allow unopened containers to stabilize at room temperature before use, to prevent condensation. Once at room temperature, the individual parts should be used within 7 days, ensuring that both parts are completely uniform before they are mixed together.

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