

## AG 806 Silver Epoxy

### Description

AG 806 is a one-part silver conductive adhesive based on epoxy resins. It can be cured and hardened at high temperatures. It is formulated for very good electrical and thermal conductive properties. It is solvent-free, has little volatiles during cure and very low shrinkage. It has great adhesion and good thermal shock performance.

### Applications

- Bonding IC chip to metal bond pad.
- General electrical connections.

### Guidelines for Use

- Thaw the silver epoxy to room temperature (25°C) before use.
- The silver epoxy may be printed or dispensed on printed circuit boards, semiconductor elements, electrodes or for other connections that require conductivity.
- The silver epoxy may be cured at 150°C in 1 hour.

### Properties

Property	Test Method	Unit	Typical Value
Chemical type			Epoxy
Appearance	Pen 10		Silver paste
Mix ratio, by weight			One component
Density	Pen 14	g/cm <sup>3</sup>	2.46
Shelf life, -20 °C	Pen 26	Month	6
Pot life, 25 °C	Pen 57	Week	1
Viscosity, Brookfield RVT, 25 °C	Pen 11	cP	65,000
Hardness	Pen 29	Shore D	82
Die shear strength		kgf	4.74
Lap shear strength		kgf/cm <sup>2</sup>	132
Volume resistivity, 25 °C	Pen 65	ohm.cm	0.0007
Glass transition temperature, T <sub>g</sub>	Pen 19	°C	68
Coef. of thermal expansion alpha-1 alpha-2	Pen 64	ppm/K	45 220
Conducting medium			Silver
Solids content		%	100

### Environment, Health & Safety

This product is RoHS compliant. It does not contain any known carcinogenic, mutagenic or teratogenic components.

### Contact Information

Penchem Technologies Sdn Bhd  
(767120-A), 1015, Jalan Perindustrian Bukit Minyak 7, 14100 Penang, Malaysia  
T: +604-501 5976, 77, 78  
F: +604-501 5979  
E: [enquiry@penchem.com](mailto:enquiry@penchem.com)  
W: [www.penchem.com](http://www.penchem.com)

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### Recommended Cure

Schedule	Temp.	Cure Time
A	120 °C	2 hours
B	150 °C	1 hour

### Storage

Tightly close original container of unused product. Store below -20 °C. Storing at lower temperatures down to -40 °C may prolong shelf life beyond 6 months. However it may take longer time to thaw the product.

### Packaging

- 5 ml EFD syringe
- 10 ml EFD syringe
- 30 ml EFD syringe
- 500 g jar