

## TK PASTE CR-3990

### ◆ Product benefits

- A thermosetting, one-component epoxy conductive adhesive.
- Ideal for die attach applications for semiconductors, which require conductivity and heat dissipation due to its excellent conductivity.
- Suitable for applications that require heat resistance, as there is little degradation in strength even under high temperature environments.
- Silver particles have little variation in particle size and have good dispensing property without clogging even in fine nozzles.
- Long usable time (pot life) provides good workability.

### ◆ Typical properties

	Typical value	Remarks
Base resin	One-component epoxy	Contains solvent
Silver content (wt.%)	75-85	Spherical silver powder
Appearance	Gray paste	
Viscosity (Pa·s)	10-25	E type viscosity meter: 5rpm at 25°C
Specific gravity (-)	3.7	At 25°C
How to use	Air puls dispenser	Internal diameter of needle: >0.2mm
Storage condition	-10°C or below	Shelf life: 6months after manufacture
Pot life (hr)	24	At 25°C
Typical curing schedule	180°C×1hr	Preheating 130°C x 0.5hr step cure is recommended to avoid voids.
Specific resistance (Ω·cm)	$2 \times 10^{-3}$	4-terminal method
Glass transition temperature (T <sub>g</sub> ) (°C)	98	DMA method
Storage modulus (GPa)	5.9	DMA method at 25°C
Coefficient of thermal expansion (ppm/°C)	60	α1
	155	α2

Data in this document is based on evaluation results and does NOT guarantee product characteristics at use.  
Make sure to try the product with equipment and adherend to be used.