# Liquid encapsulant for semiconductor

## C V 5 3 0 0 A K

## TECHNICAL INFORMATION

Encapsulation Materials Group
Plastic Materials Division
Electronic Materials Business Unit
Industrial Devices Company

**Panasonic Corporation** 

C V 5 3 0 0 A K is one component epoxy for Flip-chip underfilling.

C V 5 3 0 0 A K has high adhesion strength.

C V 5 3 0 0 A K exhibits high thermal resistivity



#### TYPICAL PROPERTIES

Properties	Unit	Data	Test Method
Viscosity(25°C)	Pa*s	20	KES 0171
Gelation time(165°C)	sec	800	KES 0175

### RECOMMENDING APPLYING CONDITION

Preheating condition Substrate: 100~120°C / 5min or more

Syrimge: r.t.

Dispensing condition Substrate :  $100 \sim 120^{\circ}$ C Curing condition  $100^{\circ}$ C/1hour +  $150^{\circ}$ C2hour

#### TYPICAL CURED PROPERTIES

Cure Conditions: 100°C/1hour+150°C/2hour

Properties	Unit	Data	Test Method
Glass Trans. Temp.	°C	160	KES 0109
C.T.E. (< Tg)	$\times 10^{-5}$ /°C	2.5	KES 0109
C.T.E. (Tg <)	$\times 10^{-5}$ /°C	8.5	KES 0109
Flexural Strength	MPa	160	JIS K6911
Flexural Modulus	GPa	9	JIS K6911
Extractable (Na <sup>+</sup> )	ppm	<30	KES 0149 A)
Inpurity ion (Cl <sup>-</sup> )		<30	

#### ATTENTION TO STORAGE

- Stored compound must be thawed before use. Warm at room temperature until no longer cool to touch (about 2hrs).
- Please use up the material within 24 hrs.
- Compound must be stored in the cool condition with sealing.

(store under -20°C in refrigerator)

• Please keep material under -20°C after receiving product.

### ATTENTION TO HANDLING

- Please avoid direct contact with this product by wearing gloves, protecting gears, etc.
- Prevent frequent skin contact. If contact occurs, wash immediately with soap and water.

**Encapsulation Materials Group** 

Phone number

81-59-346-3451

**Treatment Conditions** 

(A):PCT with 10% water for 20hrs

resin was cured and crushed

Plastic Materials Division Electronic Materials Business Unit Fax number

81-59-346-9062

**Industrial Devices Company** 

**Panasonic Corporation**