



# K-462

## Two Component Epoxy Adhesives

### Features

- K-462 is thixotropic epoxy adhesives.
- High Viscosity, High glass transition temperature(166°C) and High operating temperature(150°C).
- Easy to handle (2:1 mix ratio, Cartridge.)
- Cure at room temperature or heat to cure.
- Great electrical insulating properties, good chemical and weather resistance after cured.
- RoHS compliant.

### Product Specifications

	<u>K-462A</u>	<u>K-462B</u>
Color	Black	Gray
Viscosity		
: @25°C, S14 3rpm, cps	175,000 ~ 285,000	295,000 ~ 465,000
: @25°C, S14 0.3rpm, cps	405,000 ~ 635,000	216.5 x 10 <sup>4</sup> ~ 261.5 x 10 <sup>4</sup>
Thixotropic Index	2.25 ~ 2.27	5.6 ~ 7.2
Mix Ratio	2	1
: By weight, A : B		
Shelf Life	8 months	8 months
: @2~13°C, Unopened		

### Typical Cured Characteristics

Pot Life	: @25°C	20 mins
Full Cure Time	:	25°C x 5 ~ 7 days or 80°C x 1 hr
Hardness	:	Shore D 87 ~ 93
Specific Gravity	:	1.43 ~ 1.45
Glass Transition temperature(Tg)	: MDSC	166°C
Coefficient of Thermal Expansion	: -10~40°C	42 µm/m/°C
	160~180°C	126 µm/m/°C
Degradation Temperature	: TGA 10°C	355°C
Thermal Conductivity	:	0.3 W/mK
Thermal Insulation	:	0.01 m <sup>2</sup> K/W
Volume Resistivity	:	5 x 10 <sup>15</sup> ohm-cm
Surface Resistivity	:	5 x 10 <sup>14</sup> ohm
Dielectric Constant	: 100Hz	4.1
Specific heat	: @0°C	4.45 J/g°C
	@25°C	4.61 J/g°C



	@50°C	4.82 J/g°C
	@75°C	4.97 J/g°C
	@100°C	5.12 J/g°C
Water Absorption	: @25°C, After 24hrs	0.22%
	@80°C, After 24hrs	1.6%
	@97°C, After 1.5hrs	0.65%
Weight Loss Ratio	: @100°C	<0.5%
	@150°C	<0.5%
	@200°C	0.57%
	@250°C	0.79%
	@300°C	1.27%
	@350°C	4.1%

### **Handling & Storage**

- For high strength bonding, clean the contact surface to remove dust, grease and all other contaminants before applying the adhesive.
- Please try to evenly apply K-462 on both sides to bond. When bonding, applying a proper force is suggested to ensure both sides bond to each other.
- Curing time can vary due to oven efficiency, ambient temperatures and the adhesive thickness applied.
- Storage the product at the recommended shelf life temperatures (@2~13°C). Before use, put the product at room temperatures and do not open the container until it reaches the ambient temperature. Otherwise, moisture might condense and get into the product to cause contamination or quality concerns.
- After opened, if the product is not used up or will not be used again soon, re-seal the product and storage at the recommended shelf life temperature(s).