



## Photo-curing Adhesive for Connector Reinforcement

### Product Description

FK0793 is a photo-curing adhesive designed for computer connector PVC, PET, PI, and PCB bonding. It offers outstanding surface dryness. The cured product is not tacky and is dust-proof. It can fast-cure under UV light, which is greatly suited for encapsulating in the electronic field.

### Features

1. This product is suited for various plastics bonding.
2. This product offers high strength, which will not be destroyed by external force and can absorb fracture energy.
3. This product is also suited for encapsulation.
4. This product complies with the 2011/65/EU RoHS regulations.

### Typical Uncured Properties

Composition	FK0793
Appearance	Acrylic resin
Color	Liquid
Viscosity* 25°C, S14 10rpm, cps	Opaque
Specific Gravity@26.5°C	19,000~25,000
Refractive Index $n_D^{20}$ @25.6°C	1.0822
Certificate	1.4749
Solvent Content, %	RoHS
	0

\*This value is for reference. Please refer to COA for the actual value.

### Typical Curing Properties\*

Recommended Wavelength, nm	310~400
Minimum Light Intensity, mW/cm <sup>2</sup>	> 50
Minimum Light Energy, mJ/cm <sup>2</sup>	1,000~2,000

\*The minimum light energy is for reference.

### Direction of Use

1. It should be applied to a clean surface that is free of dirt, grease, or mold. In many cases, a simple solvent wipe is sufficient.
2. For maximum bonding strength, apply adhesive evenly to joint surfaces.
3. Cure time on the real part will depend on factors such as part geometry, materials to be bonded, bond line thickness, and the efficiency of the UV light. The cure schedule should be confirmed with actual production parts and equipment.
4. Please standardize the UV lamp intensity and illumination. Overexposure will not affect the resin properties, but if there is not enough exposure, the resin properties will change. The resin may have a lower reaction rate and may not pass the environmental test experiments.
5. This product may cause skin irritation to sensitive personnel.

### Typical Cured Properties

Glass Transition Temp.,(TMA), °C	33
CTE* (<Tg), $\mu\text{m}/\text{m}/^\circ\text{C}$	102
CTE* (>Tg), $\mu\text{m}/\text{m}/^\circ\text{C}$	248
Durometer Hardness ASTM D2240-03, Shore D	63±2
Specific Gravity @26°C	1.1764
Water Absorption Ratio (25.4°C / 24hr), %	6.84
Shear Strength, Acrylic vs. Acrylic, kgf/cm <sup>2</sup>	44
Shear Strength, Glass vs. Glass, kgf/cm <sup>2</sup>	24
Modulus of Elasticity, MPa	0.274
Refractive Index $n_D$ @25.8°C, 57%RH	1.4982
Volume Shrinkage, %	8.01
Volume Resistivity, ohm-cm	31.8×10 <sup>13</sup>
Surface Resistivity, ohm	18×10 <sup>12</sup>
Dielectric Constant, @30.21°C, 1Hz	4.8036
Dielectric Constant, @30.21°C, 10Hz	4.3021
Dielectric Constant, @30.21°C, 100Hz	3.9614
Dielectric Constant, @30.21°C, 1,000Hz	3.7055
Dielectric Constant, @30.21°C, 10,000Hz	3.4249
Dielectric Constant, @30.21°C, 100,000Hz	3.4581

\*CTE: Coefficient of Thermal Expansion

### Storage and Shelf Life

This product should be stored in a cool and dark place without any possibility of sunlight or ultraviolet exposure. Replace the lid immediately after use and avoid any possibility of light exposure. The shelf life of this product is 1 year when stored below 14~34 °C in original, unopened containers.

### Caution

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product due to long-term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. Removing adhesive from the skin thoroughly with soap and water is important. DO NOT use solvents for cleaning hands. This product is of moderate acute toxicity when swallowed. If swallowed, call a physician. Avoid contact with eyes. In case of contact, flush with water for at least 15 minutes and get medical attention immediately. For specific information on this product, consult the Material Safety Data Sheet.