

**Technical Data Sheet** 

**FP 614** 

# Photo-curing Adhesive for PVC < PC Bonding

## **Product Description**

FP614 is developed for PVC and PC plastic substrates bonding. This resin will unify with substrate and have excellent adhesion strength under UV light. In many applications, the bonding strength of this product to PVC exceeds the tensile strength of flexible PVC itself ; it also has good bonding to PC plastics, and its rapid curing and transparency properties make this resin be the best adhesive for medical devices.

## **Features**

- 1. This resin is suitable for many plastics to PVC > PC bonding.
- This resin is able to react with plastics and exhibit high adhesion strength.
- 3. This resin can fast cure to solve the problem of PVC bonding.
- 4. This product complies to the 2011/65/EU RoHS regulations.

## **Typical Uncured Properties**

	FP614
Composition	Acrylic resin
Appearance	Liquid
Color	Colorless
Viscosity* 25°C, S21 20rpm, cps	400~600
Refractive Index n <sub>D</sub> <sup>20</sup> @25.4°C	1.4818

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

## **Typical Curing Properties\***

Recommended	Wavelength, nm	310~365
Minimum Light	Intensity, mW/cm <sup>2</sup>	> 50
Minimum Light	Energy, mJ/cm <sup>2</sup>	1,500~2,000

\*The minimum light energy is for reference.

## **Direction of Use**

- It should be applied to a clean surface which is free of dirt, grease or mold release. In many cases, a simple solvent wipe is sufficient.
- 2. For maximum bonding strength apply adhesive evenly to both surfaces to be jointed.
- 3. Cure time on the really part will depend upon fators such as part geometry, materials to be bonded, bondline thickness and efficiency of the UV light. Cure schedule should be confirmed with actual production parts and equipment.
- 4. Please standardize the UV lamp intensity and illumination. Over exposure will not affect the resin properties, but the resin properties will be changed if there is not enough exposure. The resin may have lower reaction rate and may not pass the envrionmental test experiments.
- 5. This product may cause skin irritation to sensitive personnel.

# **Typical Cured Properties**

Durometer Hardness ASTM D2240-03, Shore D	69
Durometer Hardness ASTM D2240-03, Shore A	93
Refractive Index n <sub>D</sub> <sup>20</sup> @25.4°C	1.5109

## Storage and Shelf Life

The product should be stored in cool and dark place. Avoid to contacting with sunlight or ultraviolet. Replace the lid immediately to keep away from any possibility of light exposure after using. Shelf life of this product is one year when stored in room temperature from 14~34°C in original, unopened containers.

#### **Caution**

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product by long term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. It is important to remove adhesive from skin with soap and water thoroughly. DO NOT use solvents for cleaning hands. This product is of moderate acute toxicity by swallowing. 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.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.