



UL 94V-0 Approved Photo-curing Adhesive for Connector Reinforcement

Product Description

HD1232UL is photo-curing adhesive and designed for the bonding of computer connector PVC/PET/PI and metal connector. The connector will not peel off and short-circuit when the connector is bending. Showing excellent hardness and surface drying, this resin will not bond hands or dust. This product can fast-cure and is particularly suited for applications where high transparency, high speed curing and clear for encapsulating of electronic field.

Features

1. This resin is suited for ABS, PC, PVC, and FPC bonding.
2. This product will not destroy by external force with high strength and fracture energy.
3. This resin is a UL94V-0 approved compound, and suited for connector reinforcement instead of silicon process.
4. This product complies to the 2011/65/EU RoHS regulations.
5. This product obeys UL94V-0 regulations.

Typical Uncured Properties

Appearance	HD1232UL
Color	Viscous liquid
Viscosity* 25°C, S14 50rpm, cps	Light yellow
Viscosity* 25°C, S14 5rpm, cps	10,000~15,000
Thixotropic Index	37,200~55,800
Specific Gravity@25°C	2.9~4.5
Refractive Index n_D^{20}	1.23
Certificate	1.571
	RoHS, UL94V-0

*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 ²	> 50
Minimum Light Energy, mJ/cm ²	1,000~2,000

*The minimum light energy is for reference.

Direction of Use

1. 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 factors 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 environmental test experiments.
5. This product may cause skin irritation to sensitive personnel.

Typical Cured Properties

Glass Transition Temp., (MDSC), °C	41
CTE* (-10~10°C), $\mu\text{m/m/}^\circ\text{C}$	50
CTE* (45~80°C), $\mu\text{m/m/}^\circ\text{C}$	440
Durometer Hardness ASTM D2240-03, Shore D	55±2
Durometer Hardness ASTM D2240-03, Shore A	82±5
Refractive Index n_D^{20}	1.4788
Volume Resistivity, @500V, 25°C, $\Omega\text{-cm}$	9.81×10^{10}
Surface Resistivity, @500V, 25°C, $\Omega\text{-m}$	4.77×10^{11}
Dielectric Constant, @30°C, 1Hz	23.35
Dielectric Constant, @30°C, 10Hz	12.7
Dielectric Constant, @30°C, 60Hz	8.647
Dielectric Constant, @30°C, 100Hz	7.928
Dielectric Constant, @30°C, 1,000Hz	5.905
Dielectric Constant, @30°C, 10,000Hz	4.660
Working Temperature Range, °C	-20~80
Temperature Range for Storage, °C	5~25
Humidity Range for Storage(RH), %	30~70

* CTE: Coefficient of Thermal Expansion

Storage and Shelf Life

This product should be kept without any possibility of light exposure. Replace the lid immediately after use. Shelf life of this product is one year when stored in dark place below 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.