



## Photo-Curing Adhesive for Plastic Bonding

### Product Description

GN600-11 is a photo-curing adhesive designed for HIPS and PS bonding. This adhesive is able to cure rapidly under UV lights and demonstrates excellent adhesion strength. In many applications, cured product shows a better adhesion strength than the strength of original materials. Through the excellent performance, this resin proves itself to be a considerably reliable photo-curing adhesive.

### Features

1. This product has good toughness, shock resistance, and thermal shock resistance.
2. This resin is able to react with plastics and exhibit high adhesion strength.
3. After cured, the resin is transparent, and the glue line is not obvious, which does not affect the appearance of the product.
4. This product complies to the 2011/65/EU RoHS regulations.

### Typical Uncured Properties

	GN600-11
Appearance	Liquid
Color	Colorless
Viscosity 25°C, S14 100rpm, cps	3,100~4,700
Specific Gravity @ 25°C	1.0626
Refractive Index $n_D$ @ 25°C	1.4825
Recommended Applying Method	Auto/Manual Dispensing
Solvent Content, %	0
Heavy Metal Content, %	0

### 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>	1,500~3,000

### Direction of Use

1. Clean the contact surface until it is free of dirt, grease or mold release. Generally, a simple solvent wipe is sufficient. For the mental which covered by primer or processed externally, please wash the dirt with solvent.
2. Real curing time depends on various factors, such as part geometry, materials to be bonded, bondline thickness and efficiency of the UV light. Confirm the real curing time and conditions with actual production parts and equipment.
3. Please standardize the UV lamp intensity and illumination. Over-exposure will not affect the product quality; however, under-exposure will severely change the resin properties. When under-exposure, the resin may have lower reaction rate and may not pass the environmental test experiments.
4. This product may cause skin irritation to sensitive personnel.

### Typical Cured Properties

Glass Transition Temp.(MDSC), °C	-9
Durometer Hardness, Shore D	62
Water Absorption Ratio 25°C/24 hr, %	2.68
Tensile Strength, Acrylic vs. Acrylic, kgf/cm <sup>2</sup>	50.4
Elongation, %	107
Working Temperature Range, °C	-40~100

### Mechanical Test

Machine Tensile Test Test Piece Fitting Diagram:



Item	Specimen cm <sup>2</sup>	Maximum Strength, kgf	Bonding Strength kgf/cm <sup>2</sup>	Description of Material Failure
GN600-11	1.09	53.91	49.58	unbonding
GN 600-11	1.12	56.63	50.33	unbonding
GN 600-11	1.10	57.76	52.51	unbonding
GN 600-11	1.07	52.84	49.16	unbonding
Average Value	1.10	55.29	50.40	

### Storage and Shelf Life

This product should avoid any direct light exposure. Replace the lid immediately after use to prevent possible light exposure. This product has a one year minimum shelf life when stored under shades, room temperature (14~34°C), and in sealed 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, direct contact with the skin is likely to produce mild transient reddening and allergic reaction. If contacted directly, remove the 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, contact the hospital immediately. Avoid any 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.