

**Technical Data Sheet** 

GM 730-1

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# Photo-curing Adhesive for Plastic and Metal Bonding

## **Product Description**

GM730-1 is photo-curing adhesive for plastic and metal bonding, such as iron, aluminum, stainless steel and alloy. This product is able cure rapidly under the UV light and exhibit excellent adhesion strength for plastics and metals.

## **Features**

- 1. This resin has good toughness, shock resistance, and thermal shock resistance after UV curing.
- 2. This product exhibits good adhesion strength for plastics and metals.

#### **Typical Uncured Properties**

	GM730-1
Appearance	Liquid
Color	Colorless
Viscosity 25°C, S14 100rpm, cps	4,500
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.
- 2. Real curing time depends on various fators, 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.
- 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 envrionmental test experiments.
- 4. This product may cause skin irritation to sensitive personnel.

### **Typical Cured Properties**

Durometer Hardness, Shore D

Storage and Shelf Life

This product should avoid any direct light exposure. Replace the lid immediately after use to prevent possible light exposure. Shelf life of this product is one year when stored under shades, room temperature  $(14~34^{\circ}C)$ , and in sealed containers.

#### <u>Caution</u>

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.