



### GB101

GB101 is a low viscosity, one-part UV curable acrylic adhesive. It is suitable for general purpose bonding, with excellent adhesion strength to metal, glass and plastic including ABS, PC, PVC, PET, PETG, PMMA, and TPU. It can be used for bonding tube sets and fittings, reservoirs, catheters, and syringe needles. GB101 can be cured in a few seconds upon exposure to UV light, contains no non-reactive solvent, and is environmentally friendly.

#### Physical Properties—Uncured

Base compound	Acrylated urethane
Appearance	Clear, light amber
Density	1.05
Viscosity (25°C, cP)	350 ~ 450

#### Physical Properties—Cured

Appearance	clear
Hardness (Shore)	D70
Tensile at break (MPa)	15
Elongation at break (%)	85
Modulus (MPa)	435
Water absorb (%)	
Room temp, air, 24h	0.1
Boiling water, 2h	3.5
Linear shrinkage (%)	0.5

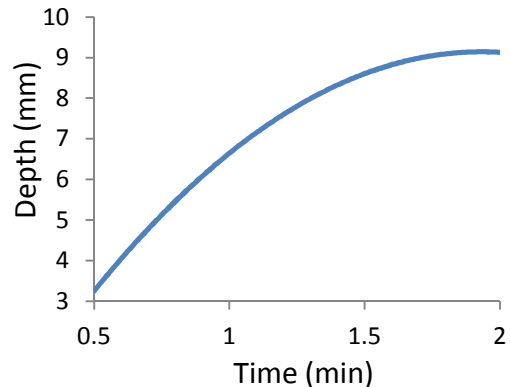
#### Specification and Approval

ISO 10993-5

**Cure** UV/Vis or LED

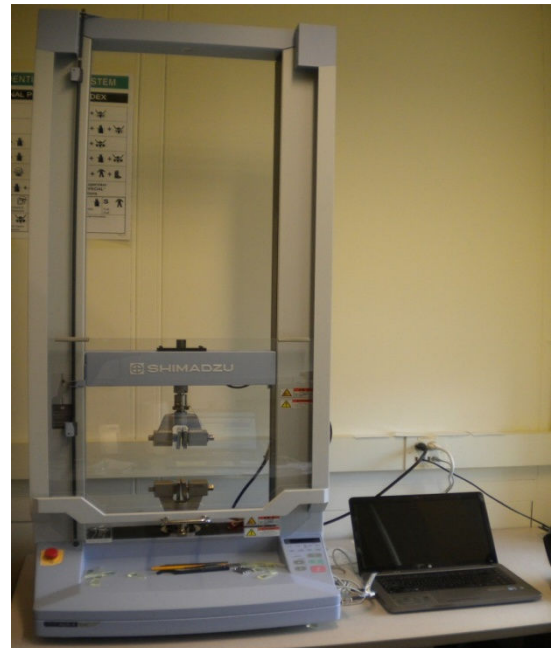
#### Depth of Cure

The figure below shows the depth of cure as a function of exposure time (at 55 mW/cm<sup>2</sup>).



#### Sterilization

The device bonded with this adhesive can be sterilized with general methods, including ethanol, gamma radiation and ethylene oxide. It is recommended that customers test the device after sterilization with a specific method.



#### Use directions

This product is sensitive to UV as well as visible light. Exposure to artificial lighting should be kept to a minimum before curing process. Dispensing device should be light blocking. For best performance, bond surfaces should be clean and free of grease. Cure rate depends on many factors, such as lamp intensity, distance from light source, required cure depth, bond gap, and light transmittance of the substrate. Excess uncured adhesive can be cleaned with organic solvent.



Oxygen may inhibit the curing of this product, and thus curing in oxygen rich environment should be avoided.

### **Storage and Shelf Life**

The product should be stored in dry and dark places with temperature between 10-30°C. Do not return product to the original container as materials being taken out from containers may have been contaminated. The product should be kept away from extreme heat, cold, and direct light. Do not refrigerate. This product has a 12 month shelf life from the date of shipment if unopened.

### **General Information**

The product should be kept out of reach from children. Cautious should be taken to avoid contact with skin, eyes, and vapor inhalation. Repeated and continuous skin contact with uncured material may cause irritation. Remove the material from skin or eyes with soap and water, but not organic solvent. For more safe handling information of this product, consult the Material Safety Data Sheet (MSDS).

### **Note**

The data contained herein are furnished for information only and are believed to be reliable. Gigbond LLC cannot assume responsibility for the results obtained by others over whose methods Gigbond LLC has no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Gigbond LLC specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Gigbond LLC's products. Gigbond LLC specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Gigbond LLC patents that may cover such processes or compositions. Gigbond LLC recommends that each prospective user test his/her proposed application to determine its suitability for the purpose intended prior to incorporating any product or application in its manufacturing process, using these data as a general guideline.

### **Warranty, Limited Remedy and Limited Liability**

This product will be free from defects in material and manufacture at the time of purchase. If this product is

defective within the warranty period stated above, your exclusive remedy shall be, at Gigbond's option, to replace or repair the Gigbond product or refund the purchase price of the Gigbond product. It is the user's responsibility to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. GIGBOND MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Except where prohibited by law, Gigbond will not be liable for any indirect, special, incidental or consequential loss or damage arising from this Gigbond product, regardless of the legal theory asserted.

Gigbond  
116 Research Dr  
Bethlehem, PA18015  
<http://www.gigbond.com>  
email: [sales@gigbond.com](mailto:sales@gigbond.com)  
tel: 1 978 308 9786