



GB118

GB118 is a low viscosity, one-part UV curable acrylic adhesive. Excellent adhesion was found to substrates from glass and plastics (PVC, PMMA, ABS, PC, SS). The adhesive has strong adhesion upkeep against plasticizer. Cured products showed good flexibility, chemical resistance, and weatherability. It can be used for bonding facemask, reservoir, catheter, plastic tubing, and breathing circuit. This adhesive can be cured in a few seconds upon exposure to UV light, and it contains no non-reactive solvent and is environmentally friendly.

Physical Properties—Uncured

| | |
|----------------------|--------------------|
| Base compound | Acrylated urethane |
| Appearance | Clear, light amber |
| Density | 1.07 |
| Viscosity (25°C, cP) | 390 |

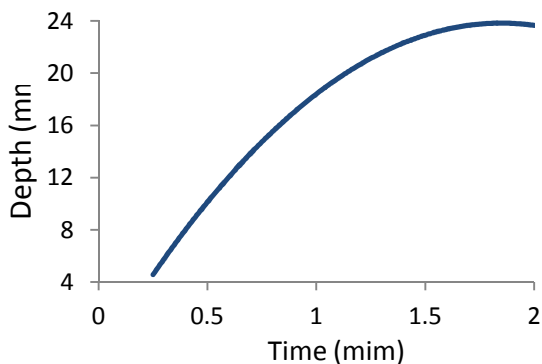
Physical Properties—Cured

| | |
|-------------------------|-------|
| Appearance | clear |
| Hardness (Shore) | D85 |
| Tensile at break (MPa) | 30 |
| Elongation at break (%) | 30 |
| Modulus (MPa) | 750 |
| Water absorb (%) | |
| Room temp, air, 24h | 0 |
| Boiling water, 2h | 2.2 |
| Linear shrinkage (%) | 0.8 |

Cure UV/Vis or LED

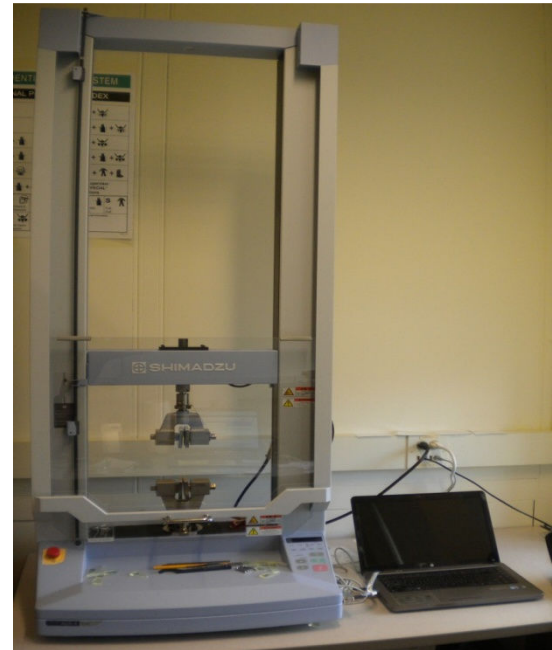
Depth of Cure

The figure below shows the depth of cure as a function of exposure time (at 55 mW/cm²).



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

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