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# **BLUEBOND**<sup>TM</sup>

# **UV-8675**

### **UV/LED CURE ACRYLATED URETHANE**

TECHNICAL DATASHEET MARCH 2023

#### PRODUCT DESCRIPTION

UV-8675 is primarily designed for bonding rigid or flexible PVC and polycarbonate, while not inducing stress cracking under typical molded stress levels. It enables easy assembly of components with close fitting tolerances (i.e. joining polycarbonate to flexible PVC tubing), and is recommended for applications involving small gaps less than 0.25mm. It has also shown excellent adhesion to a wide variety of substrates including glass, many plastics and most metals. Suitable for use in the assembly of disposable medical devices.

### **Applications**

- Polycarbonate to PVC tubing
- CCM Assembly
- Plastic Assembly

#### **Features**

- Low Viscosity
- Fast Cure Time
- High Bond Strength
- Reduced Surface Tack

#### Substrates

- Polycarbonate
- PVC
- Aluminum
- Glass

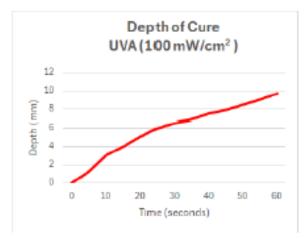
## **Packaging**

- Syringes
- Liters
- Pails

| TYPICAL PROPERTIES OF UNCURED MATERIAL |                    |  |
|----------------------------------------|--------------------|--|
| Property                               | Value              |  |
| Chemical Class                         | Urethane Acrylate  |  |
| Appearance                             | Transparent Liquid |  |
| Odor                                   | Mild Odor          |  |
| Viscosity, 25°C                        | 2000-4000          |  |
| Density g/cc                           | 1.10               |  |

| TYPICAL PROPERTIES OF CURED MATERIAL  |                        |  |
|---------------------------------------|------------------------|--|
| Property                              | Value                  |  |
| Hardness                              | D-65                   |  |
| Glass Transition Temperature (Tg), °C | 25                     |  |
| Tensile Modulus, psi                  | 100,000                |  |
| Tensile Strength, psi                 | 3500                   |  |
| Elongation, %                         | 280                    |  |
| Volume Resistivity, Ω-cm              | 8.0 x 10 <sup>14</sup> |  |

| UV CURE INFORMATION                   |                      |  |
|---------------------------------------|----------------------|--|
| Property                              | Value                |  |
| Minimum Intensity, mW/cm <sup>2</sup> | 100                  |  |
| Optimum Wavelength, nm                | 365, 405             |  |
| Optimum Cure Conditions               | Refer to Chart Below |  |



#### **Directions for Use:**

- 1. This product is light sensitive; exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling.
- 2. The product should be dispensed from applicators with black feedlines.
- 3. For best performance bond surfaces should be clean and free from grease.
- 4. Cure rate is dependent on lamp intensity, distance from light source, depth of cure needed or bond line gap and light transmittance of the substrate through which the radiation must pass
- 5. Cooling should be provided for temperature sensitive substrates such as thermoplastics.
- 6. Plastic grades should be checked for risk of stress cracking when exposed to liquid adhesive.
- 7. Excess uncured adhesive can be wiped away with organic solvent (e.g. Acetone).
- 8. Bonds should be allowed to cool before subjecting to any service loads

#### **Storage**

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling. Shelf life is 12 months from date of manufacture in unopened container.

#### **Optimal Storage:**

25°C (+/- 10°C). Material removed from containers may be contaminated during use. Do not return product to the original container. Epoxyset cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact Epoxyset info@epoxyset.com or by phone at +1 (401)-726-4500

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