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# BLUEBOND™

## UV-8315

### UV/LED CURE ACRYLATED URETHANE

#### TECHNICAL DATASHEET

MARCH 2023

#### PRODUCT DESCRIPTION

UV-8315 is a low viscosity, fast curing urethane acrylate that bonds well to engineered plastics, glass and metal based substrates. This product requires direct UV exposure during cure. UV-8315 is also tested and qualified for Hub-Needle bonding application in the disposable medical devices industry.

#### Applications

- Glass Assembly
- Glass to Metal
- Hub-Needle Bonding

#### Features

- Low Viscosity
- High Temperature
- Fast Cure Time
- Reduced Surface Tack

#### Substrates

- Glass
- Plastics
- Aluminum

#### Packaging

- Syringes
- Liters
- Pails

#### TYPICAL PROPERTIES OF UNCURED MATERIAL

Property	Value
Chemical Class	Urethane Acrylate
Appearance	Clear Liquid
Odor	Mild Odor
Viscosity, 25°C	200-400
Density g/cc	1.10

#### TYPICAL PROPERTIES OF CURED MATERIAL

Property	Value
Hardness	D-70
Glass Transition Temperature (Tg), °C	45
Linear Shrinkage, %	1.5
Tensile Strength, psi	7500
Elongation, %	26
Volume Resistivity, Ω-cm	8.0 x 10 <sup>14</sup>

## UV CURE INFORMATION

Property	Value
Minimum Intensity, mW/cm <sup>2</sup>	250
Optimum Wavelength, nm	365, 405
Optimum Cure Time	2 sec (250 mW/cm <sup>2</sup> )

### 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

**DISCLAIMER:** All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.