



**Tru-Bond™ UB 3000**  
 Universal Bonder  
 UV/Visible Light Cure Adhesive

Technical Data Sheet  
 May 2010

**PRODUCT DESCRIPTION**

The Tru-Bond™ Universal Bonding Series of products bonds rigid substrates to flexible substrates with UV/Visible light. Tough, durable bonds are created making it possible to join glass, metals, ceramics and plastics that include; ABS, polycarbonate, PET, PETG, flexible vinyls, urethanes, acrylics and epoxy. The assemblies can survive thermal and humidity cycling while maintaining optical clarity. This formulation also cures through many translucent substrates, as well as, UV blocked plastics.

**Typical Physical Properties**

**Uncured:**

Chemical Class.....Urethane Acrylate  
 Color.....Clear  
 Components.....Single  
 Non-Volatile materials.....99+%  
 VOC.....<1%  
 Flashpoint.....171 °F  
 Viscosity .....3000 cps  
 Specific gravity.....1.07  
 Shelf life.....24 mos.  
 Solubility.....ketones, oxygenated solvents

**Cured:**

Color..... Clear  
 Refractive Index.....1.49  
 Optical Clarity.....>98%  
 Tensile strength.....312 psi  
 Elongation ASTM D638.....214 %  
 Modulus of Elasticity ASTM D882.....136 psi  
 Volume Shrinkage.....5.8 %  
 Lineal Shrinkage.....1.8 %  
 Water absorption ASTM D570 (24 hrs.).....7.5 %  
 Boiling Water % ASTM D570 (2 hrs.).....4.3 %  
 Shore hardness.....90A  
 Temperature range.....-65°F to 300°F  
 Adhesive Lap Shear (Acrylic).....354psi  
 Adhesive Lap Shear (glass).....657 psi  
 Adhesive Lap Shear (polycarbonate).....788 psi  
 Adhesive Lap Shear (Polycarbonate to Steel).....716 psi

**Fixture Time and Tack-free Time:**

Light Source	Irradiance	Fixture Time/Sec.	Tack free Time/Sec.
CT100	20 mW/cm <sup>2</sup>	< 5	N/A
Fusion® D bulb	1,000 mW/cm <sup>2</sup>	< 1	< 4
Unvitron PortaRay 400R	250 mW/cm <sup>2</sup>	< 2	N/A

**Depth of Cure (inches, min):**

Light Source	Irradiance	Exposure Time 30 seconds
400 W Metal Halide Bulb	20 mW/cm <sup>2</sup>	3 mm

**PROCESSING**

ITW Devcon products are easily applied by syringe dispense or specialty valve spray units. The materials cure extremely fast in bondlines, e.g. where the surfaces are not exposed to air, with UV or Visible radiation. Exposure doses range from .5 - 2 mJ/cm<sup>2</sup> depending on the intensity of the lamps and configuration of the assembly.

**Precautions:**

Please refer to the appropriate material safety data sheet (MSDS) prior to using this product.

**Warranty:**

Devcon will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

**Disclaimer:**

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Devcon makes no representations or warranties of any kind concerning this data.

For technical assistance, please call 1-800-933-8266

**FOR INDUSTRIAL USE ONLY**

**ORDERING INFORMATION:**

<b><u>Stock No.</u></b>	<b><u>Unit Size</u></b>
18705	25 ml Syringe
18706	Liter