



Tru-Bond™ DC 1000
 Dual Cure
 UV/Visible Light/Heat Cure Adhesive

Technical Data Sheet
 July 2010

PRODUCT DESCRIPTION

The Tru-Bond™ Dual Cure series of products can be used with UV/Visible Light and/or a Heat cure. These rapid curing products are designed for multiple applications including protective coatings, potting and tamper proofing. Provides a hard scratch resistant surface for decals, tags and emblems. This unique product can cure tack free under standard low intensity black lights without experiencing oxygen inhibition.

Typical Physical Properties

Uncured:

Chemical Class.....	Hybrid Acylate
Color.....	Clear
Components.....	Single
Non-Volatile materials.....	99+%
VOC.....	<1%
Flashpoint.....	>212 °F
Viscosity	1000 cps
Specific gravity.....	1.17
Shelf life.....	24 mos.
Solubility.....	ketones, oxygenated solvents

Cured:

Color.....	Clear
Refractive Index.....	1.55
Optical Clarity.....	>98%
Tensile Strength (PSI).....	1028
Elongation % ASTM D638	7.4
Modulus of Elasticity D882 (PSI).....	19,212
Volume Shrinkage.....	5.65 %
Lineal Shrinkage.....	1.78 %
Water absorption ASTM D570 (24 hrs.).....	1.1 %
Boiling Water % ASTM D570 (2 hrs.).....	4.5 %
Shore hardness.....	78D
Temperature range.....	-65°F to 300°F

This product can be cured in combination with UV/Visible light or with heat alone.

Heat Cure.....15 min. @ 300°F

Fixture Time and Tack-free Time:

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

Depth of Cure (inches, min):

Light Source	Irradiance	Exposure Time 30 seconds
400 W Metal Halide Bulb	20 mW/cm ²	4 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/cm² 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:

<u>Stock No.</u>	<u>Unit Size</u>
18300	25ml syringe
18301	Liter