



Tru-Bond™ PSA 3000

Pressure Sensitive Adhesive
UV/Visible Light Cure Adhesive

Technical Data Sheet

September 2010

PRODUCT DESCRIPTION

The Tru-Bond™ PSA series are one-part, solventless adhesives with a new proprietary technology. These products offer two distinct curing advantages. First, this material can be cured through previously assembled clear or translucent substrates in the traditional UV curing mode, or the adhesive can be cured first and then allows for assembly of the parts at some future point. The second alternative provides the ability to use with any substrate, clear, translucent or opaque. This adhesive can bond a wide range of substrates including PE, PP, Delrin, and most plastics, metals, glass, or ceramics and can be sprayed, roll coated, bead or brush applied.

Typical Physical Properties

Uncured:

Chemical Class.....	Acrylic
Color.....	Clear
Components.....	Single
Non-Volatile Materials.....	99+%
VOC.....	<1%
Flashpoint.....	>212°F
Viscosity.....	3000 cps
Specific gravity.....	1.07
Shelf life.....	24 mos
Solubility.....	ketones, oxygenated solvents

Cured:

Color.....	Clear
Refractive Index.....	1.50
Optical Clarity.....	>98%
Water absorption ASTM D570 (24 hrs.).....	0.0 %
Boiling Water % ASTM D570 (2 hrs.).....	2.0 %
Shore hardness.....	20 A
Temperature range (Shear Adhesive Failure Test).....	SAFT = 260 °F

Performance of Cured Product.

Peel Force to Various Substrates. PSTM1 Test., 3-mil adhesive on PET film, Cured at 1.2 J/cm2 with Fusion System D bulb. Assembled and then tested at 24 hours. 90° peel test [Convert to N/10 mm by multiplying by 1.75]

Substrate	Peel – pounds per linear inch (pli)	Failure Mode	Comment
PVC	9	Adhesive – all on Mylar	Skips at higher pull speed.
Acrylic	6-8	Mixed adhesive	Skips
Polycarbonate	11.5	Cohesive	Steady
Glass	10-11	Adhesive – all on glass	Steady
ABS	11	Mixed adhesive	Steady
Copper	11	Mixed adhesive	Steady
Polypropylene	1-2	Adhesive – all on Mylar	Skips

UV Cure and Timeline Latitude for DEVCON Tru-Bond™ 18401. Fusion Systems 300WPI lamp- “D”(doped) bulb at 4 inches. 3-mil PET to untreated steel

Age of uncured adhesive	Age of cured Film	Nominal Thickness – mil	UV Dose – J/cm ²	30 second peel – pound per linear inch – pli	12+ hour peel - pli
2 years	2 months	0.5	0.5	2-4	8
2 months	2 years	0.5	1.0	1-2	8
2 years	2 months	0.5	1.5	2	8
2 years	2 months	3.0	0.5	4	8
8 months	2 days	3.0	0.8	3	10-12
2 months	2 days	3.0	1.5	2	10-12

NOTE: All of these test pieces passed >10 days of creep resistance at ambient and 50C.

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:

Stock No. Unit Size

18401 25ml syringe
 18402 Liter