

## Tru Bond 18401 Series

### Pressure Sensitive Adhesive (PSA)

#### ORDERING INFORMATION

	<u>Stock No.</u> 18401	<u>Package Size</u> 25ml
Description	<p>DEVCON UV-PSA series of one-part, solvent less adhesives offer a patent pending technology with two distinct curing advantages. First, this material can be cured through previously assembled clear or translucent substrates to form an immediate adhesive bond of high optical clarity. The second benefit is that this material can also be dispensed onto any substrate, clear or opaque, and then exposed to UV light to form a tacky, fully cured, PSA surface. This allows for the immediate assembly of mated parts or for assembly at some future point.</p> <p>Included in the unique physical features of this product is the ability to bond a wide range of substrates including PE, PP, Delrin, and most plastics, metals, glass, or ceramics. The adhesive can be used to form clear bond lines made as a film surface, coating, or bead.</p>	
Applications	<ul style="list-style-type: none"> <li>• Sign making and other graphic assembly.</li> <li>• Touch pad, membrane pad and other keypads.</li> <li>• Automotive interiors - trim, graphics, light panels.</li> <li>• Lamination of foam, foils, any plastic film, felt, mesh, etc.</li> <li>• Form-in-place gaskets and O-rings - replace die cut forms.</li> </ul>	

#### PRODUCT DATA

<b>Typical Physical Properties <b>Uncured</b></b>	Colour	Straw colour with distinctive odour
	Nominal Viscosity cps	2,500
	Non Volatile materials	99%
	Flashpoint	> 38°C
	Density g/cc	1.19
	Solubility	Acetone, MEK, Isopropanol, Toluene, Ethyl Acetate and similar solvents
<b>Typical Physical Properties <b>Cured</b></b>	Colour	Clear
	Voc during cure	Products lose less than 0.1% by weight when UV cured as films
	Volume Shrinkage	4.8%
	Shore Hardness	10 A
	Temperature Range	-23°C – 52°C

Peel force to various substrates. PSTM1 Test, 0.007mm adhesive on PET film. Cured at 1.2 J/cm<sup>2</sup> with Fusion system D bulb. Assembled and then tested at 24 hours, 90° peel test.

<b>Substrate</b>	<b>Peel N/10mm</b>
PVC	16
Acrylic	12
Polycarbonate	20
Glass	18
ABS	19
Copper	19
Polypropylene	2.5

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Static Shear or "Creep Resistance" Test	<p>To determine the resistance of the adhesive to 'creep', the same assembly as for the peel test is prepared except that a 25 mm overlap of the Mylar steel is made. After a 24 hours bond time a one kilogram weight is hung from the Mylar film and the number of hours recorded to failure. Greater than 10 days is considered a 'passing' value.</p> <p>Devcon UV PSA products undergo a dramatic improvement in static shear with ambient aging after UV cure. The ageing occurs if the adhesive has been used to assemble parts or laminates as well as a film under a release liner.</p> <p>Static Shear – PET to steel, 0.007mm adhesive, 1.0 J/cm<sup>2</sup>, 25mm<sup>2</sup> overlap, 24 hr bond time, 1 kg static load</p> <table border="0"> <thead> <tr> <th style="text-align: center;"><b>Aging after UV</b></th><th style="text-align: center;"><b>Time to Failure – minutes</b></th></tr> </thead> <tbody> <tr> <td style="text-align: center;">12 Hours</td><td style="text-align: center;">50 minutes</td></tr> <tr> <td style="text-align: center;">120 hours – 5 Days</td><td style="text-align: center;">&gt;14,400 min (test halted @ 10 days)</td></tr> </tbody> </table>		<b>Aging after UV</b>	<b>Time to Failure – minutes</b>	12 Hours	50 minutes	120 hours – 5 Days	>14,400 min (test halted @ 10 days)
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Storage & Shelf life	<p>Shelf life is 12 months from manufacture Storage should be between 12°C and 32°C</p>							
Precaution	<p>For complete safety and handling information, please refer to Material Safety Data Sheets prior to using this product.</p>							
Warranty	<p>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.</p>							
Disclaimer	<p>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 product information visit <a href="http://www.devconeurope.com">www.devconeurope.com</a> alternatively for technical assistance please call +44 (0) 870 458 7388 (UK) or +49 431 718830 (Germany)</p>							