

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"> • Sign making and other graphic assembly. • Touch pad, membrane pad and other keypads. • Automotive interiors - trim, graphics, light panels. • Lamination of foam, foils, any plastic film, felt, mesh, etc. • Form-in-place gaskets and O-rings - replace die cut forms. 	

PRODUCT DATA

Typical Physical Properties Uncured	<p>Colour Straw colour with distinctive odour</p> <p>Nominal Viscosity cps 2,500</p> <p>Non Volatile materials 99%</p> <p>Flashpoint > 38°C</p> <p>Density g/cc 1.19</p> <p>Solubility Acetone, MEK, Isopropanol, Toluene, Ethyl Acetate and similar solvents</p>																
Typical Physical Properties Cured	<p>Colour Clear</p> <p>Voc during cure Products lose less than 0.1% by weight when UV cured as films</p> <p>Volume Shrinkage 4.8%</p> <p>Shore Hardness 10 A</p> <p>Temperature Range -23°C – 52°C</p>																
<p>Peel force to various substrates. PSTM1 Test, 0.007mm 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.</p> <table> <tr> <th>Substrate</th><th>Peel N/10mm</th></tr> <tr> <td>PVC</td><td>16</td></tr> <tr> <td>Acrylic</td><td>12</td></tr> <tr> <td>Polycarbonate</td><td>20</td></tr> <tr> <td>Glass</td><td>18</td></tr> <tr> <td>ABS</td><td>19</td></tr> <tr> <td>Copper</td><td>19</td></tr> <tr> <td>Polypropylene</td><td>2.5</td></tr> </table>		Substrate	Peel N/10mm	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 assembly 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/cm², 25mm² overlap, 24 hr bond time, 1 kg static load</p> <table><tr><th>Aging after UV</th><th>Time to Failure – minutes</th></tr><tr><td>12 Hours</td><td>50 minutes</td></tr><tr><td>120 hours – 5 Days</td><td>>14,400 min (test halted @ 10 days)</td></tr></table>	Aging after UV	Time to Failure – minutes	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</p> <p>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.</p> <p>For product information visit www.devconeurope.com alternatively for technical assistance please call +44 (0) 870 458 7388 (UK) or +49 431 718830 (Germany)</p>						