

Permabond UV630 is a UV-curing adhesive suitable for use on glass, metal and in particular plastics. It has a longer wavelength UV cure so can be used on UV-stabilised plastics. UV630 cures to give a colourless bond so is ideal for applications where aesthetic appearance is vitally important.

### Physical Properties

<b>Chemical Type</b>	<b>Methacrylate Ester Single Part</b>
<b>Colour (when cured)</b>	<b>Colourless</b>
<b>Viscosity @ 25°C mPa.s</b>	<b>250</b>
<b>Maximum Gap Fill</b>	<b>0.2 mm</b>
<b>Density</b>	<b>1.1</b>
<b>Cure Wavelength</b>	<b>365 - 420 nm</b>
<b>Cure time (4 mW/cm<sup>2</sup>)</b>	<b>6 seconds</b>

\* Actual cure times will depend the power of the UV lamp, its spectral output, the distance between the lamp and the components, and the transmission characteristics of the substrates. The handling time quoted here was determined using a low power, hand held lamp. Most industrial UV light sources would give a faster rate of cure.

### Performance

<b>Shear Strength</b>	PC/PC	<b>9 MPa</b>
<b>Tensile Strength</b>		<b>12 MPa</b>
<b>Refractive Index</b>		<b>1.47</b>
<b>Elongation</b>		<b>110%</b>
<b>Hardness</b>		<b>60 Shore D</b>
<b>Service Temp.*</b>		<b>-55 to +120°C</b>
<b>Dielectric Strength</b>		<b>12 KV/mm</b>
<b>Dielectric Constant</b>	1MHz @25°C	<b>4</b>

\*Higher temperatures may be endured for short periods providing the parts are not unduly stressed.

### Surface Preparation

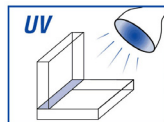
Surfaces should be clean, dry and grease free before applying the adhesive. Particular care should be taken to remove silicone based cleaning agents which may have been used previously to clean glass. Some metals such as aluminium, copper and its alloys will benefit from light abrasion with emery cloth, or similar, to remove the oxide layer. Permabond Cleaner A can be used to degrease most surfaces. Where thermoplastic surfaces are involved we recommend tests are done to ensure compatibility.

### Adhesive Application

Adhesive can either be applied directly from the bottle or dispensed via automated dispensing equipment for more accurate dosing.

It is important to try to prevent air entrapment within the joint as this could be detrimental to the finished appearance of the adhesive.

Parts should be firmly held and not disturbed during cure as this could lead to a 'crazing' effect. Expose the joint to ultra-violet light for the appropriate time to ensure full cure.



For help selecting a suitable lamp and/or dispensing equipment, please contact the Permabond technical helpline.

### Storage and Handling

<b>Storage Temperature</b>	<b>5 to 25°C</b>
<b>Shelf Life</b> Stored in original unopened containers	<b>12 months</b>

Users are reminded that all materials, whether innocuous or not, should be handled in according to the principles of good industrial hygiene. Full information can be obtained from the Material Safety Data Sheet.

Contact Permabond:

Europe: Tel +44(0)1962 711 661  
UK Helpline: 0800 975 9800  
Deutschland: 0800 10 13 177  
France: 0805 11 13 88  
info.europe@permabond.com

US: Tel 00 1 732-868-1372  
Helpline 800-640-7599  
info.americas@permabond.com

Asia: Tel 00 886 939 49 3310  
info.asia@permabond.com

[www.permabond.com](http://www.permabond.com)

21/02/2006