UV620

UV Curable Adhesive

Technical Information Sheet

Permabond UV620 is a rapid curing, high strength adhesive which cures on exposure to UV light. Its excellent optical clarity and resistance to yellowing make it ideal for bonding glass and crystal for a high quality finish.
It can be used on a wide variety of applications including glass furniture, decorative ornaments and other glass objects where high strength and appearance are vital.

Physical Properties

Chemical Type	**Methacrylate Ester Single Part**
Colour (when cured)	**Colourless**
Viscosity @ 25°C mPa.s	**2500**
Maximum Gap Fill	**1.5 mm**
Density	**1.1**
Cure Wavelength	**365 - 400 nm**
Cure time (4 mW/cm²)	**5 seconds**

** 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

Shear Strength	Glass/Steel	**9.1 MPa**
Tensile Strength	ASTM D-2095	**14 MPa**
Refractive Index		**1.49**
Elongation		**75%**
Hardness		**62 Shore D**
Service Temp.*		**-55 to +120°C**
Dielectric Strength		**12 KV/mm**
Dielectric Constant	1MHz @25°C	**4**

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

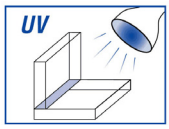
Surface Preparation

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

Storage Temperature	**5 to 25°C**
Shelf Life Stored in original unopened containers	**12 months**

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.

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