Permabond[®] "or "or UV639 - Plastic & glass bonding

ISO 9001:2015 Certified "Our Science ... Your Success"

PERMABOND[®] UV639 is a UV-curing adhesive developed for use on plastics. It has superb adhesion to acrylic, polycarbonate and PETG. This adhesive can also be used to bond glass, metals and other materials. UV639 cures to give a colourless bond so is ideal for applications where aesthetic appearance is vitally important.



Permabond® UV639 Product data

The following technical data for Permabond UV639 is a guideline and does not constitute a specification. Full technical information, please refer to the technical data sheet, available at www.permabond.com. Our experienced worldwide trained distributor network means no matter where in the world you are located, Permabond representatives can be called upon to assist you with your bespoke applications.

	UV639
Description	UV curable adhesive for plastics
Appearance	Colourless, clear
Viscosity @ 25°C	20rpm: 800-1,200 mPa.s (cP)
Typical fixture time (PMMA)*	Low power 4mW/cm ² battery lamp: 5secs LED 200mW/cm ² lamp: <1secs
Typical fixture time (Polycarbonate) *	Low power 4mW/cm ² battery lamp: 10secs
Cure wavelength**	365 - 420 nm**
Overlap shear strength (IS04587)	Polycarbonate >7 N/mm ² (>1000 psi)^ Acrylic >6 N/mm ² (>870 psi)^ PETG >5 N/mm ² (>725 psi)^
Block shear strength (ISO4501)	PMMA/Glass >8 N/mm ² (>1160 psi)^ PMMA/PMMA 6 N/mm ² (870 psi)^^
Tensile strength (ISO37)	13 N/mm² (1900 psi)
Elongation at break (ISO868)	>200%
Hardness (ISO868)	80 Shore A
Service Temperature °C	-55 to +150
Available pack sizes	50ml Bottles / 100ml Bottles / Bulk on request



* The cure time depends on the power of the UV lamp, its spectral output, the distance between the lamp and the components, and the transmission characteristics of the substrates.
 ** LED UV lamps have a narrow range of spectral output. It is important to check suitability with Permabond in order to match the LED lamp's peak wavelength with that of the adhesive's photoinitiator to ensure optimal adhesive cure.
 ^ Substrate failure was observed

100

280

Substrate failure was observed
 Cohesive failure



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315

400



700

WAVELENGTH (nanometres)

INFRARED

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The information given and the recommendations made herein are based on our experience and are believed to be accurate. No guarantee as to, or responsibility for, their accuracy can be given or accepted, however, and no statement herein is to be treated as a representation or warranty. In every case we urge and recommend that purchasers, before using any product, make their own tests to determine, to their own satisfaction, its suitability for their particular purposes under their own operating conditions. Always refer to current product technical datasheet for most recent and accurate technical information.