

FAST UV LIGHT CURING UV643



Permabond UV643 is an ultra-fast UV-curing adhesive that bonds rigid plastic, metal, and glass with a tackfree finish.

One of the key features of UV643 is its incredibly fast cure speed – glass to glass bonding takes a fraction of a second using a high intensity UV lamp. Even with a lower-powered lamp, or when curing through thick, UV-stabilized plastic, the adhesive cures very quickly.

UV643 is ideally suited for fast production lines due to its cure speed, versatility, and aesthetically pleasing finish. UV643 is thixotropic, offering excellent controlled flow properties, allowing easier and more accurate dispensing.

Once cured, UV643 is completely tack-free and actively resists yellowing. This ensures a clean, professional finish long after bonding. In addition, the adhesive passes 85/85 testing (85% relative humidity at 85°C), making it highly suitable for automotive and outdoor applications.



KEY FEATURES:

- ▶ Very fast cure (less than a second)
- ▶ Great on rigid plastics and thermoplastics
- ▶ Cures through thick plastics
- ▶ Cures through UV-stabilized plastics
- ▶ Cures through colored plastics and glass
- ▶ Passes 85/85 testing
- ▶ Thixotropic, controlled flow
- ▶ Tack-free cure
- ▶ Great environmental resistance
- ▶ Actively resists yellowing
- ▶ Excellent resistance to thermal cycling

IDEAL FOR BONDING:

- ABS
- Acrylic
- Aluminum
- Composites
- Glass
- Mild Steel
- PC
- PET
- PETG
- Rigid PV
- *And many more*



DESCRIPTION

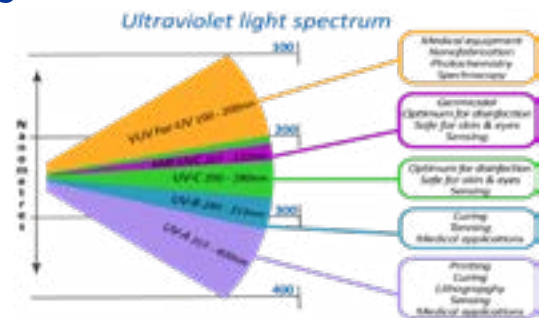
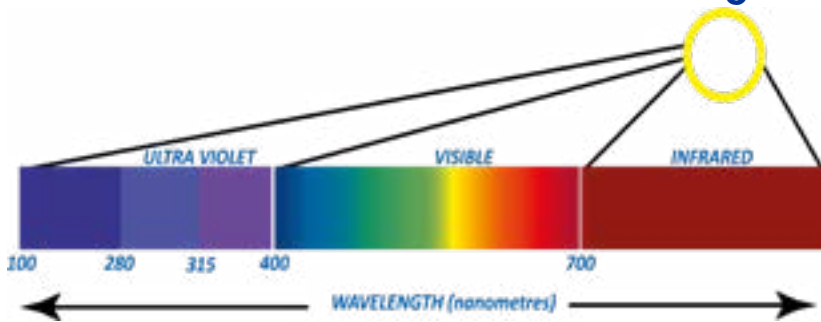
The following technical data for Permabond UV643 is a guideline and does not constitute a specification. For full technical information, please refer to the technical data sheet, available at www.permabond.com. Please contact Permabond to discuss your project.

Permabond UV643	
Description	Ultra fast-curing, tack free, weather resistant UV adhesive
Appearance	Pale yellow (uncured), clear (cured)
Features	Great on rigid plastics and thermoplastics. Cures through thick and/or UV-stabilized plastics as well as colored plastics and glass.
Viscosity @ 25°C	20rpm: 2000 mPa.s (cP) / 2rpm: 17,600 mPa.s (cP)
Specific Gravity	1.0
Hardness (ISO868)	65 Shore D
Typical fixture time	UV LED 400nm 150 mW/cm ² : <1 second on acrylic
Cure wavelength	365 - 420 nm - see below for more information
Shear strength	Polycarbonate: 1885 psi (13 N/mm ²)* Acrylic: 1015 psi (7 N/mm ²) PETG: 870 psi (6 N/mm ²)* Rigid PVC: 1150 psi (8 N/mm ²)* Aluminum to PC: 1450 psi (10 N/mm ²) Mild steel to PC: 1450 psi (10 N/mm ²)
Storage temperature	Between +5 and +25°C (+40 and +75°F)

What is 85/85 testing?

85/85 testing is the abbreviated term for relative humidity (RH) testing an item, in conditions that exceed 85°C with an RH of 85%. This "accelerated life" test is often used to assess behaviours and limitations in the designs of electrical components, HVAC systems and various applications in automotive production. If you require an IP (Ingress Protection) Rating for your electrical project, it is more likely to pass if it has had the 85/85 testing.

Understanding UV Light:



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