



Technical Data Sheet

Bondloc B3106 UV Adhesive

PRODUCT DESCRIPTION

B3106 LV is a single component, low viscosity, and fast curing UV/Visible curable structural adhesive designed for bonding wide variety of thermoplastics and thermo-set plastics to itself and to a wide variety of other substrates.

APPLICATIONS

Plastic lamination, plastic housing assembly. Ideal for bonding PVC, PC, PET, ABS, Polyurethane, Acrylic, Polysulfone, PETG, Styrene, PEEK, Polyimide, PV Alloys, Composites, Nylon, FRP, etc. B3106 LV is widely used in window bonding and sealing application.

FEATURES

High strength, and high performance one-part UV curable adhesive system. The adhesive cures in seconds upon exposure to UV radiation to form an impact resistant, weather resistant and flexible bond.

INSTRUCTIONS FOR USE

This adhesive is UV sensitive. Exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling. Adhesive product should be dispensed from applicators with black feed lines. For best performance bond surfaces should be clean and free from grease.

UV cure rate is dependant on lamp intensity, distance from light source, depth of cure needed or bond line gap and light transmittance of the substrate through which the radiation must pass.

Recommended intensity for cure in an adhesive application are 40-mW/cm² minimum with an exposure time of 5-6 times the fixture time at this same intensity. For tack free surface cure, as necessary in coating, potting or tacking applications, higher intensity UV is required.

CURE CONDITIONS

Cure can be affected with both low and high intensity UV light sources. A low UV intensity of 30 mW/cm² will cure highly transmitting substrate with < 0.010" gap in 5 seconds or 0.070" to 0.090" gaps in 10 to 20 seconds. A high UV intensity of 100 mW/cm² will cure highly transmitting surfaces with < 0.010" gap in 2 seconds or 0.100" to 0.200" gaps in 10 to 20 seconds.

HEALTH & SAFETY

This technical information sheet does not constitute a Safety Data Sheet (SDS). Before using this product ensure you have read and fully understood this products SDS.

TECHNICAL FEATURES

Chemical Type	Urethane Methacrylate
Appearance	Clear
Specific Gravity @ 25°C	1.1
Viscosity @ 25°C mPas (cP)	50-70
Refraction Index @25°C	1.475
Toxicity	Low

TYPICAL BOND CHARACTERISTICS

Tensile Modulus (psi)	32,750
Tensile Strength	3,750
Elongation "break %	23
Hardness Shore D	65
Tg	32°C
Water Absorption %	2.3
Linear Shrinkage %	1.3

UV CURING SYSTEM

Lamp Type	5"x5" Flood	3/16" Spot	1"x6" Focused
Max. Lamp Intensity @ 365 nm	300 mW/cm ²	400 mW/cm ²	8000 mW/cm ²
Adhesive Absorption Range (nm)	300 - 500	300 - 500	300 - 500
Cure Speed (Sec)			
Glass to Glass Bonding	12	11	<5
Surface Cure Speed	16	14	<5

PROPERTIES OF CURED ADHESIVE Shear Strength, psi, ASTM D4501

PC to PVC PROP	2, 100
PVC to PU	2, 250
PET to PVC	1, 300
PVC to Acrylic	1, 375
ABS to PC	1,150

PACKAGING FORMAT

Bottles.....50ml, 250ml

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PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheets (SDS) for this and all other products being used are understood by all persons who will work with the product. Warranty: All products purchased from or supplied by Bondloc are subject to terms and conditions set out in the contract. Bondloc warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Bondloc is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Bondloc makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.

