



Technical Data Sheet

Bondloc B3106 Plastic Bonder

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 dependent 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.

TECHNICAL FEATURES

Chemical Type	Urethane Methacrylate
Appearance	Clear
Specific Gravity @ 25°C	1.1
Viscosity @ 25°C cps	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

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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			
Surface Cure Speed	12 16	11 14	<5 <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

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.

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