

TECHNICAL DATA SHEET

GelMagic[™]

STRUCTURAL EPOXY ADHESIVE

DESCRIPTION:

System Three GelMagic is a non-sagging, two-component structural epoxy adhesive designed to bond wood and other substrates. GelMagic is unique in that it starts as two self-leveling liquids, which form a soft, non-sagging paste when mixed. The Part A resin is a blue color which disappears upon proper mixing. Gel-Magic is also toughened, which gives it high peel strength when cured. As the product cures, the toughening agent precipitates to form a two-phase system, which turns the product opaque. GelMagic cures at room-temperature and displays good elevated temperature properties following a mild post cure.

PHYSICAL PROPERTIES:	Resin	Fast Hardener	Slow Hardener
Viscosity @ 25°C(77° F) cps	6600	2800	2800
Density (lb. per gallon)	9.90	8.20	8.20
Color	Blue	Amber	Amber
MIXED SYSTEM PROPERTIES: Viscosity @ 25°C(77° F) cps Mix ratio by volume resin/hardener Mix ratio by weight resin/hardener Working time @ 25° C (100 gram mass) Tack-free time @ 25° C	N/A	5300	5300
	100	50	50
	100	41	41
	N/A	30 min.	120 min.
	N/A	3 hours	16 hours

Recommended minimum application temperature	50°F
Recommended maximum service temperature	170°F

TYPICAL CURED PROPERTIES(72 hr cure @ 25°C, or 2 hr. @ 60°C):

Lap-Shear Strength, psi:	Polyester Laminate	2800*	Aluminum	2200		
(ASTM D1002)	Concrete		Brass	1560		
,	Wood(Maple)	1800*	Copper	1700		
*substrate failure	Mild Steel	2010	Stainless Steel	2390		
Tensile Elongation at break						
Flexural Strength, psi						
Flexural Modulus, psi	410,000					
Compressive Yield Strength						
Heat Deflection Temperature, ° F						

APPLICATION: Ensure surfaces to be bonded are clean and dry, free from dust, dirt and grease. Apply adhesive to both surfaces, allow to sit 5-10 minutes on porous substrates. If all material is absorbed by the substrate, apply more adhesive. Clamp all the pieces together, using only moderate clamping pressure. Remove clamps after 6-8 hours.

NOTE: GelMagic may be used directly on new wood without pre-coating with an epoxy coating or sealer. If substrates are pre-coated, sand any cured material in the bonding area prior to using GelMagic.

All tests were conducted in accordance with ASTM procedures.

For health and safety information concerning this product, please refer to the MSDS sheets for Silvertip Gel Magic MSDS sheets are available on our website at www.systemthree.com, or by calling or writing System Three Technical Support.

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