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TECHNICAL DATA SHEET

GelMagic™
STRUCTURAL EPOXY
ADHESIVE

DESCRIPTION:

System Three GelMagic is a toughened, structural gelled adhesive, designed for superior bonding to most materials including properly prepared plastics. The mixed adhesive will not run or sag even when used on overhead or vertical surfaces. It is ideal for bridging gaps in poorly mated joints with no loss of strength. GelMagic is 100% waterproof, unaffected by oil, kerosene and many other chemicals and cures to an opaque white. GelMagic is particularly well suited for use in boat construction and repair. It is also an ideal adhesive for general woodworking applications when an easy to use, high strength, gap filling, waterproof adhesive is called for. GelMagic cures at room temperature and displays good elevated temperature properties following a mild post cure at 140°F for 2 hours.

RESIN PROPERTIES:

Viscosity @ 25°C(77°F) 90,000 cps
 Density 9.80 lb/gal
 Color Blue

HARDENER PROPERTIES:

Viscosity @ 25°C(77° F)60,000 cps
 Density 8.40 lb/gal
 Color Amber

MIXED SYSTEM PROPERTIES:

Viscosity @ 25°C (77°F) 80,000 cps
 Mix ratio by weight (resin/hardener)100/46
 Mix ratio by volume (resin/hardener)100/50
 Working time @ 25° C (100 gram mass)30 minutes
 Tack-free time @ 25° C 3 hours
 Clamp time @ 25° C 8 hours minimum
 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 1100*	Brass 1560
	Wood(Maple) 1800*	Copper 1700
*substrate failure	Mild Steel 2010	Stainless Steel 2390

Tensile Strength, psi 7600
 Tensile Elongation at break 7.0%
 Flexural Strength, psi 13,000
 Flexural Modulus, psi 410,000
 Compressive Yield Strength, psi 13,000
 Heat Deflection Temperature, ° F 140

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.

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 SDS sheets for SilverTip Gel Magic. SDS sheets are available on our website at www.systemthree.com, or by calling or writing System Three Technical Support.

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