



EL-301 EPOXY LAMINATING SYSTEM

PRODUCT BULLETIN



ROOM TEMP, UNFILLED
AMBER

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DESCRIPTION

EL-301 is an unfilled epoxy laminating resin systems with excellent handling properties which will produce dimensionally accurate laminated duplications and tools. They offer maximum cloth penetration (wet-out), low viscosity, low odor, and excellent cured physical properties. The EL-301 was developed for all types of room temperature laminating and close tolerance tooling applications. This system can also be used as adhesives due to its ability to cure as a thin film creating a very strong, durable bond. Use EL-301 with ADTECH surface coat systems ES-201-PC, ES-218 and ES-204. **Typical applications include: checking and inspecting fixtures and gauges, assembly and drill fixtures, master die molds, thin film adhesive, router and trim fixtures, foundry patterns, bonding pattern and model boards and composite stretch from skin.**

HANDLING CHARACTERISTICS @ 25°C/77°F

Mix Ratio (parts by weight)	100R/25H
Mix Ratio (parts by volume)	3.4R/1H
Density (mixed)	9.38 lbs/gal
.....	0.040 lbs/cu in
Specific Gravity (mixed).....	1.12 grams/cc
Mixed Viscosity.....	1000-2000 cps
Work Life	23-33 minutes
Demold Time	16 hours
Complete Cure	3-5 days
Color.....	Amber
Shelf Life of Resin and Hardener (in original unopened containers)	2 years

PHYSICAL PROPERTIES

6 Layer, 10 Ounce Glass Fabric Laminate:

Ultimate Tensile Strength	35,300 psi
Tensile Modulus	2.34 x 10 ⁶ psi
Ultimate Flexural Strength	46,410 psi
Flexural Modulus	1.43 x 10 ⁶ psi

Cast Bar:

Compressive Strength.....	13,390 psi
Hardness.....	86 Shore D
Coefficient of Thermal Expansion.....	2.42 x 10 ⁻⁵ in/in/°F
Tensile Elongation	6.2%
Shrinkage	0.005 in/in
Heat Deflection Temperature	>80.2°C/176°F

EL-301 Tech/Revised 3/5/10
Supersedes 12/13/06

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