



# EcoPoxy Resin & Build Hardener

## KEY FEATURES;

- 100% solids
- 100% water proof
- Excellent chemical resistance and hardness
- High Adhesion
- Good clarity and gloss retention
- Low viscosity
- Non Toxic, Low Odor, Low VOC's

## RECOMMENDATIONS:

### INTENDED USE:

Composites Manufacturing, Wood Lamination, Wood Finishing.

### SURFACES:

Fiberglass, Wood, Metal, Concrete and Masonry

### DESCRIPTION:

**EcoPoxy Resin and Build Hardener** is an advanced 100% solids high performance epoxy laminating system formulated to manufacture high performance structures with or without post-curing. The system is suitable for the manufacturing of large structures and composite parts by wet layup with low viscosity and excellent wetting characteristics. The system is also suitable for filament winding applications and adaptable to VRTM. Parts can be released from a mold without post-curing. **EcoPoxy Resin and Build Hardener** has also been designed for coating and reinforcing fabric saturation in wood composite boat building.

This system exhibits excellent cured mechanical properties providing stronger, lighter, higher performance parts that can be sanded, shaped, machined, drilled and tapped. It can be used in combination with **EcoPoxy Gel Coat** or to make rigid molds and tooling.

**EcoPoxy Resin and Build Hardener** is commonly used for structural wood construction. It may be used for: all woods laminations, coating, scarfing, strip planking, as well as bonding in form of fillet joints applications when filled with wood flour and silica.

**EcoPoxy Resin and Build Hardener** should not be applied when surface temperature is above 90 degrees F. or below 60 degrees F.



**Mix Ratio: 3:1**

**Pot Time:** 20 minutes depending on ambient temperature

**Cure Time:** 48 hours @ 70 degrees F. @ 50% RH using spread rate of 200 sf/gall.

**Set to Touch:** 6-8 hours depending on ambient temperature, humidity and thickness.

**Minimum Re-apply Time:** 6-8 hours depending on ambient temperature, humidity and thickness

**Maximum Re-apply Time:** 24 hours

**Clean Up:** De Natured Alcohol

**Storage:** 55 degrees F. through 85 degrees F. with tightly sealed lids

### **EcoPoxy Resin and Build Hardener Application:**

The viscosity is adapted for squeegee, brush or roller application and provides a perfect surface due to its surface tension properties. The mixing ratio must be accurately followed. It is not possible to change the ratio, it would result in lower mechanical properties. The mixture should be thoroughly stirred to ensure full homogeneity. It is important to note that epoxy systems tend to heat up much faster in a pot than as a thin film. It is therefore necessary to only mix the necessary amount usable within the given pot life. Keeping the mixture in flat open containers reduces the risks of exothermic reaction

The standard procedure of working with epoxy systems applies to this system. It can be applied by squeegee, brush, roller, infused or injected. In case of laminating over a cured surface without peel ply, it is required to deglaze, clean and degrease the support prior to laminating.

It is recommended to have workshop temperature conditions between 60-80 degrees F. in order to facilitate the mixing and the reinforcement fibers impregnation. A lower temperature will increase the viscosity of the mix as well as its pot life. On the contrary, a higher temperature will reduce the viscosity and the pot life of the mix.