

## Instructions Water Based Pre-Stain

### Step 1: Preparation of Raw Wood for Water Based Stain

Before applying stain, all raw wood projects require preparation sanding, and all existing finishes require prep cleaning and sanding. *If you skip this critical step, your finish may fail.*

#### **Prep Sanding for Raw Wood Projects**

See our video: How to Prep Sand Raw Wood

Sand open-grain wood (e.g., oak, ash, mahogany, parawood) with 120-grit sandpaper, followed by 150-grit, then 180-grit.

Sand closed-grain wood (e.g., cherry, pine, maple, birch, alder) with 150-grit sandpaper followed by 220-grit.

Remove dust with a vacuum, compressed air, an oil-free tack cloth or a water-dampened rag.

Do not over-sand with fine-grit sandpapers; this will close and seal the wood grain, preventing ideal color absorption.

Do NOT use steel wool with water-based finishes; the particles will get trapped in the finish and rust.

#### **Prep Sanding for Existing Finish**

Remove any existing finish by sanding with 120-grit-sandpaper & scuffing with a wire brush if needed.

Remove dust with a vacuum, compressed air, an oil-free tack cloth or a water-dampened rag.

#### **Reducing Grain Raise on Raw Wood**

To reduce grain raise, dampen the wood with water after prep sanding. Let dry completely, then lightly sand with fine-grade (220-320) foam sanding pad.

### Step 2: How To Apply General Finishes Water Based Pre-Stain Conditioner

#### **General Finishes Water Based Pre-Stain Conditioner Application Steps**

For use with water-based stains.

#### **Hand-Application Over Raw Wood:**

Stir Pre-Stain Conditioner Natural to reincorporate solids that have settled to the bottom of the can before and throughout the application process.

Pre-Stain Conditioner Natural can improve color uniformity over difficult-to-stain wood species such as pine.

However, it will limit color absorption, so a darker wood stain may be required to get the desired depth of color.

Test your complete finishing process before starting. The color of stain is affected by variances in wood and deepened by the application of topcoat.

Divide your project into manageable sections: top, side, drawer, door, table seam.

Apply a LIBERAL amount of Pre-Stain Conditioner to ensure easy workability using a synthetic bristle brush, foam brush, pad applicator or roller. If not enough is used, the surface may dry too quickly, causing an uneven appearance.

On large projects, leave wet edge between sections to prevent lap lines.

Apply Pre-Stain Conditioner to a complete section and wipe off the excess evenly with the grain using quality paper or shop towels. Check for missed spots and lap marks before moving to the next section. Do NOT use cotton t-shirts because they will "push" the stain around and not absorb it.

Immediately correct lap marks by rewetting the entire working area with stain and wiping off the excess.

Pull excess stain out of corners and detail with a bristle brush.

**Let Pre-stain Conditioner dry 20 minutes but no more than 30 minutes before applying GF water-based stain** in ideal conditions: 50-70% humidity, 70°F/20°C.

Then apply 1+ coats of **General Finishes Water Based Wood Stain**.

To accelerate dry time in humid conditions, add **General Finishes Accelerator** before applying and work in a space with good ventilation and air movement.

Increase open time, if needed, with up to 5% **General Finishes Extender** if allowed by local regulations. GF Extender will improve flow and leveling and increase open time, which is helpful in dry climates. **California Residents:** Adding more than 2% of GF Extender will make the products non-compliant per SCAQMD Regulations. GF assumes no liability for the improper use of these products.

#### **Spray Application Over Raw Wood:**

Before spraying, strain topcoat through a fine-mesh filter.

Spray wet films at 3-5-mil thickness. HVLP: 1.1mm-1.3mm spray tip, medium air cap. Verify tip sizes with your equipment supplier.

Wear a full filter respirator (NIOSH/MSHA-approved) and work in a ventilated space.

Keep your gun at a 90° angle, 6-8" from the surface. On large, flat areas, use wet, even patterns 6-8" wide. For narrow surfaces, reduce the fan pattern to 2-3" wide to reduce overspray. Overlap each pass 25% to conceal lines.

**Let Pre-stain Conditioner dry 20 minutes but no more than 30 minutes before applying GF water-based stain** in ideal conditions: 50-70% humidity, 70°F/20°C.

To accelerate dry time in humid conditions, add General Finishes Accelerator before applying and work in a space with good ventilation and air movement.

#### **Custom Stain Colors**

Add 3 tablespoons of any **General Finishes Milk Paint** color to one pint of Water-Based Pre-Stain Conditioner Natural to make a colored wood stain, or 6 tablespoons Milk Paint to 1 quart Pre-Stain Conditioner.

#### **Dilute Dark Colors**

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Add up to 95% Pre-Stain Conditioner to **General Finishes Water Based Wood Stain** and **General Finishes Dye Stain** to lighten the color tone.

**Warning:** Do not use water-based products with Linseed Oils or Danish Oils.

Cleanup of Water Based Products

Application tools and materials containing water-based products can be cleaned with soap and water immediately after use.

### Product Spills

Spills may be able to be removed from fabric and carpet if cleaned immediately with soap and water.

Storage of Water Based Products

*Please be mindful of the manner in which water-based products are stored and how long they have been in storage. They not a forever product.*

### Life of Product

Water-based products do not last forever, even when unopened. General Finishes products are **best used within 1 year**. However, the life of the product may be extended several more years with proper care and storage (see Storage Tips below).

Water-based products **can last 3-5 years** if the can is unopened, in good condition and stored in correct temperatures.

Product that is 3 years old will not look like product that is 6 months to 1 year old. You will see more stratification or separation as the product ages. Always stir thoroughly before using.

### Foul Smell

If your product has a foul smell, it is contaminated and no longer in useable condition.

### Clumps & Settling

Gravity can cause some solids to settle on the bottom of the can and slight separation on the top. This is normal. If working with older product stir with a paint mixing attachment on a drill.

If the solids dissolve and clumps smooth out after mixing from the bottom, the product is in good condition for use.

Inability to reincorporate large, chunky lumps after stirring for several minutes is an indication that the product has frozen and can no longer be used.

### Storage Tips

See video tutorial: Tips on Storing Leftover Finishes

Water-based finishes crystalize and form a skin due to evaporation when the air-tight seal on a can is broken at first use. The following best practices will increase the life of your product:

Pry open sealed lids with a paint can opener by hooking under the lid's rolled edge. The use of a screwdriver can disfigure the rim and lid, impairing a complete seal.

Keep lid closed while working. Pour what you will use into a bowl, paper cup, or plate, and close can lid as you work. Clean the chime of the can thoroughly with a paper towel before closing to create a complete seal. Product falling into the chime can be minimized by using a pouring lid, such as Fitsall. Avoid wiping used brushes on the lid.

Pound the lid in place using a rubber mallet to avoid distorting the chime or lid. Dents in the lid from direct contact with a hammer can impair a complete seal. Alternatively, place a flat piece of wood over can lid and firmly pound shut.

Store in moderate temperatures. Avoid temperatures below 50°F/10°C or above 100°F/26°C. Keep from freezing. Frozen and heat-damaged product cannot be revitalized. Temperature-controlled spaces, such as a basement, are ideal for storage. Do not store product in an attic, garage, in direct sunlight, or next to something warm like a water heater or furnace.

Store can upside down to create a liquid seal, minimize evaporation and reduce the chance of crystallization. Decant remaining product from the can before stirring.

Decant leftovers to a smaller container when the finish is almost used up. Alternative storage containers for water-based products are plastic FIFO bottles or glass bottles. Do not fill metal-lidded containers completely to prevent them from rusting.

### The following water-based product mixtures can be stored:

Product thinned with up to 15% **General Finishes Extender** or **General Finishes Accelerator** can be stored, with the exception of thinned **General Finishes Water Based Wood Stain**.

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Mixtures involving colors & sheens within the same product line, such as:

High Performance Satin + High Performance Gloss

Snow White Milk Paint + Coastal Blue Milk Paint

Amber Dye Stain + Merlot Dye Stain

### **The following product mixtures should NOT be stored:**

Any water based product with thinned tap water; water often contains bacteria that will adversely affect stored paint.

Topcoat + Stain or Paint

Milk Paint + Chalk Style Paint

Water Based Wood Stain + Dye Stain

Warnings and Warranties

### **Water-Based Pre-Stain Conditioner Warnings and Warranties**

### **Limited Warranty**

General Finishes products must be tested to your complete satisfaction before using. General Finishes will not be responsible for color satisfaction, misapplication, nor compatibility with other manufacturers' products. General Finishes will be responsible only for the cost of our products, and not for costs such as labor, damage or project replacement.

### **Contamination and Compatibility**

Our finishes are engineered as a system and are compatible with each other. General Finishes cannot guarantee an ideal refinish when applying our products on top of or combined with another company's products or over surfaces that have been in contact with waxes, polishes or sprays containing contaminants such as silicone. Test for adherence and aesthetics before beginning.

**FIRST AID:** Seek immediate medical attention if symptoms occur due to the following. Eye Contact: Remove any contact lenses. Flush eyes with water for 20+ minutes while lifting upper and lower eyelids. Skin Contact: Wash thoroughly after handling. Inhalation: Move to fresh air and loosen clothing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Ingestion: Call physician immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

**Prop 65 WARNING:** This product can expose you to Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Hydrazine, 1,4-Dioxane, Propylene oxide, which are known to the State of California to cause cancer, and Ethanediol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**CAUTION:** MAY CAUSE EYE IRRITATION.

**WARNING:** Keep out of reach of children. Avoid contact with eyes. Keep container tightly closed when not in use. Wash thoroughly after handling.