

## Step 1: Preparation for Gel Stain

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

### **Preparation for Raw Wood Projects**

See our video: [How to Prep Sand Raw Wood](#)

1. Prep sand with 120-grit sandpaper followed by 150-grit sandpaper. Do not over-sand with fine-grit sandpapers; this will close and seal the wood grain, preventing ideal color absorption.
2. Remove dust with a vacuum, compressed air, a tack cloth or a water-dampened rag.
3. Let dry completely before applying General Finishes product.

### **Preparation for Projects with an Existing Finish**

For high-use areas with heavy grime build-up and oil from hands, give your project a deeper cleaning.

See our video: [How to Prepare Existing Finishes](#)

1. Scuff clean with a Scotch Brite pad and a 50:50 mix of denatured alcohol and water. Dry 1-2 hours. Avoid cleaning with products containing phosphates (salt), which can linger in the substrate and produce a white haze. If your project requires a deeper cleaning, see *Power Prep Cleaning Highly Used Existing Finishes* below.
2. Sand lightly with a fine-grade (220-320) foam sanding pad.
3. Remove dust with a vacuum, compressed air, a tack cloth or a water-dampened rag.
4. Let dry completely before applying General Finishes product.

### **Power Prep Cleaning Highly Used Existing Finishes**

See our video: [How to Power Prep Existing High Use Finishes for Stain or Paint](#)

1. Scrub clean with a detergent, such as Spic and Span or Dawn, using a Scotch Brite pad.
2. Rinse well with water.
3. Scrub clean with a Scotch Brite pad and a 50:50 mix of denatured alcohol and water. Dry 1-2 hours.
4. Sand lightly with a fine-grade (220-320) foam sanding pad.

5. Remove dust with a vacuum, compressed air, a tack cloth or a water-dampened rag.
6. Let dry completely before applying General Finishes product.

**Alternative Cleaning Solutions for Existing Finishes** (Not as aggressive or effective as denatured alcohol; requires rinsing.)

1. 50:50 mix of bleach and water
2. 50:50 mix of vinegar and water
3. Mineral spirits can be used when working with water-based products, but only if the surface is thoroughly rinsed and allowed to dry for 72 hours.

## Step 2: How To Apply General Finishes Gel Stain

### **General Finishes Gel Stain Application Steps**

1. Stir the stain to reincorporate solids that have settled to the bottom of the can.
2. Use only with adequate ventilation. Open windows and doors, or use other means to maintain fresh air flow during application and drying.
3. If desired, thin stain with mineral spirits. Start by adding 5% by volume and increase up to 15% as needed.
4. There is usually no need for **General Finishes Pre-Stain Conditioner Natural** to improve color uniformity. Gel Stain is loaded with pigments that provide deep uniform coverage.
5. Test your complete finishing process before starting. The stain color is affected by variances in wood and deepened with the application of topcoat.
6. Divide your project into manageable sections: top, side, drawer, door, table seam.
7. **Hand-Application over Raw Wood:**
  - See our video on [How To Apply Gel Stain to a Raw Wood Surface](#) or illustrated instructions here.
  - Apply a slip coat of mineral spirits over the raw wood immediately before application to facilitate the flow of stain on the surface and reduce lap marks. (This is not a conditioner)
  - Working quickly, apply a LIBERAL coat using a natural bristle brush, foam brush, staining pad, pad applicator or foam roller. Gel Stain dries quickly for all the reasons customers love it: it is loaded with colorants and solids. If not enough stain is used, the surface may dry too quickly, causing an uneven appearance. On

large surfaces, leave a wet edge between passes to prevent lap marks. We recommend getting a buddy to help apply the stain.

- Stain your project section by section and wipe off the excess evenly with the grain using absorbent shop towels or open-weave cloths, such as cotton terry towels for larger projects. Check for missed spots and lap marks before moving to the next section. Do NOT use cotton t-shirts to wipe away stain 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 details with a natural bristle brush.
  - **Let the stain dry 12-24 hours** in ideal conditions: 70°F/20°C, 50-70% humidity. **Inadequate dry time is one of the top reasons for Gel Stain finish failure.** If in doubt, wait longer. **Increase dry time if:**
    - Humidity is over 80%
    - 3+ coats are applied (not recommended)
    - Thick coats are applied
    - Layering General Finishes water- and oil-based products:
      - Water over oil: Let oil-based products dry 72+hr before applying water-based products
      - Oil over water: Let water-based products dry 24+hr before applying oil-based products
    - If Gel Stain is tacky after 5 days, dry time requirements have not been met and it may never dry. The only alternative is to strip off the finish and start over.
8. Optional: apply a second coat to deepen the color. Apply no more than 2 coats.
9. Finish with 3 coats of General Finishes topcoat, letting each coat dry 72 hours.
10. **Dry Brushing Over an Existing Finish**
- Finishes dry in two directions: upwards the air side and absorption in raw wood. When finishes are applied over an existing finish, dry times **must** be increased.
  - See our video tutorials:
    - [How To Update Kitchen Cabinets Using a Dry Brush Technique](#)
    - [How to Update Existing Wood Finishes With Gel Stain](#)
  - Prepare surface by scrubbing with a 50:50 mix of denatured alcohol and water using a Scotch Brite Pad. Lightly sand with

fine-grade (220-320) foam sanding pad. Wipe off dust with an oil-free tack cloth or a water-dampened rag.

- Test your complete finishing process before starting. The stain color is affected by variances in wood and deepened with the application of topcoat.
  - Apply stain with a natural bristle brush or foam brush. Feather out uneven areas and pull excess stain from corners using a bristle brush. Discharge accumulated stain from the brush onto a paper towel soaked with mineral spirits as you work.
  - **Let the stain dry 72+ hours** in ideal conditions: 70°F/20°C, 50-70% humidity. You can tell if an oil-based finish is dry if it is no longer tacky, and cool to the touch. If in doubt, wait longer. Increase dry time if:
    - Humidity is over 80%
    - 3+ coats are applied
    - Thick coats are applied
    - Applying over products from other brands
    - Layering General Finishes water- and oil-based products:
      - Water over oil: Let oil-based products dry 72+hr before applying water-based products
      - Oil over water: Let water-based products dry 24+hr before applying oil-based products
    - If Gel Stain is tacky after 5 days, dry time requirements have not been met and it may never dry. The only alternative is to strip the finish off and start over.
11. Optional: apply a second coat to deepen the color. Apply no more than 2 coats.
12. Finish with 3 coats of General Finishes topcoat, letting each coat dry 72 hours
13. **Painting on Stain Without Wiping Away:**
- When painting on Gel Stain without wiping away, **let the stain dry 72+ hours** between coats in ideal conditions: 70°F/20°C; 50-70% humidity.
  - Layering General Finishes water- and oil-based products:
    - Water over oil: Let oil-based products dry 72+hr before applying water-based products
    - Oil over water: Let water-based products dry 24+hr before applying oil-based products
  - If you are using General Finishes Java Gel Stain, General Finishes recommends using **General Finishes Dark Chocolate Milk Paint** instead of painting on Gel Stain. This Milk Paint color

matches a solid application of Java Gel Stain, is much faster to apply, and offers easy water clean up.

## Mixing Gel Colors

- Gel stains can be intermixed to create custom colors.
- Gel Stain can be mixed with no more than 10% Liquid Oil Stain is added by volume. The liquid stain will thin the stain, which may help it spread more easily but it will not have as much coverage.
- Gel Stain can be layered over other General Finishes water and oil-based stains. Allow for adequate dry time when layering water and oil products. See video tutorial: [Can Oil and Water Based Finishes Be Applied on the Same Project](#)

## Step 3: Topcoat Over Oil Based Stain

Always seal General Finishes oil-based stains with 3 coats topcoat to lock in the color. You can use either oil-based or water-based topcoat.

When layering water-based and oil-based products, increase the dry time:

- Water over oil: Let oil-based products dry 72+hrs
- Oil over water: Let water-based products dry 24+hrs

**DO NOT use [General Finishes Enduro-Var Topcoat](#) with oil-based products.**

## General Finishes Arm-R-Seal

- Thinner consistency.
- Oil-based.
- Ambers.
- Available in Satin, Semi-Gloss and Gloss sheens.
- Because of its thinner consistency, Arm-R-Seal is easier to apply over large and detailed surfaces, such as kitchen cabinets.
- General Finishes most durable retail topcoat and suitable for high-use areas.

## General Finishes Gel Topcoat

- Thick consistency.
- Oil-based.

- Ambers.
- Available in Satin sheen. This satin is shinier than Arm-R-Seal satin.
- Durable and suitable for high-use areas.

### **General Finishes High Performance or General Finishes Flat Out Flat Water Based Topcoat**

- Looks "white" in the can.
- Dries clear.
- Water cleanup.
- Brush or spray.
- High Performance is very durable and suitable for high-use areas.
- Flat Out Flat is designed to look and feel like a wax finish; it is recommended for low-use projects.

### **Cleanup of Oil Based Products**

#### **Cleanup**

Clean up application materials and hands with mineral spirits or waterless hand cleaner, like Goop or Gojo.

#### **Disposal**

Take great care when disposing of product-soaked applicators. Application materials, such as brushes and towels, containing oil-based products may spontaneously catch fire if improperly discarded. Immediately place all application materials soaked with this product in a sealed, water-filled metal container. Dispose of in accordance with local fire regulations.

#### **Spills**

Clean up spills with mineral spirits immediately while wet. If oil-based finishes dry, they are difficult to clean off any surface, clothes or carpet. Carpet may discolor if cleaned with mineral spirits.

#### **Prevention**

Protect your workspace with a tarp, your hands with gloves, and your clothes with an apron.

### **Storage of Oil Based Stains**

#### **Life of Product**

General Finishes products do not last forever, even when unopened. They

are best used within 1 year of the manufacture date listed on the bottom of the can. The life of the product may be extended with proper care and storage.

### **Storage Tips**

See our video: [Tips on Storing Leftover Finishes](#)

Oil-based products start to harden and cure when exposed to oxygen. The following best practices will increase the life of your product:

1. **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.
2. **Keep lid closed while working.** Decant what you will use into a bowl, paper cup, or plate, and close can lid as you work. Every minute the can is open, the product is curing.
3. **Clean the chime of the can** thoroughly with a paper towel before closing to create a complete seal. Product in the chime can be minimized by using a pouring lid, such as Fitsall. Avoid wiping used brushes on the lid.
4. **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.
5. **Store in moderate temperatures.** Avoid temperatures below 50°F/10°C or above 80°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 an open flame source such as a water heater or furnace.
6. **Store can upside down** to create a liquid seal, minimizing oxygen exposure from within the can. Decant remaining product from the can before stirring.
7. **Add Bloxygen To Sealed Product.** Bloxygen is an argon gas system that prevents oxygen and moisture from hardening leftover product. Because Bloxygen gas is heavier than air, it sinks to the surface of the leftover finish, creating a barrier between product and air trapped in the container.
8. **Decant** leftovers to a smaller container when the finish is almost used up to reduce the volume of oxygen in the container.

## **STORING MIXTURES**

- Mixtures involving colors & sheens within the **same product line** CAN be stored  
E.g., Java Gel Stain + Brown Mahogany Gel Stain
- Mixtures involving **different oil-based products** should NOT be stored for later use.  
E.g.: Gel Stain + Mineral Spirits (for thinning)  
Gel Stain + Liquid Oil-Based Stain  
Gel Stain + Gel Topcoat

### **Alternative Storage Containers**

- Glass Bottles that seal completely.
- Do not store oil-based products in plastic bottles.

Gel Stain hardens faster than other products. It may soften slightly if a small amount of mineral spirits is added.

## **Warnings and Warranties**

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

### **Limited Warranty**

General Finishes products must be tested to your complete satisfaction before using, including compatibility with other manufacturers products. General Finishes will be responsible only for the cost of our products and will not be responsible for any costs such as labor, damage, or replacement costs.

### **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.

**Danger:** Contents are COMBUSTIBLE. Keep away from heat and open flame. Application materials or other waste soaked with this product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or waste in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.



CAUTION: Contains ALIPHATIC HYDROCARBONS. VAPOR HARMFUL. Use only with adequate ventilation. DELAYED EFFECTS FROM LONG-TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating & inhaling the contents can be harmful or fatal.

### **Warning**

If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log onto [www.epa.gov/lead](http://www.epa.gov/lead).

Do not swallow; first aid: drink water to dilute product. May cause eye and skin irritation; first aid: flush eyes thoroughly with water.

FIRST AID: In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, do not induce vomiting. Get medical attention immediately.

### **Warning**

This product contains a chemical known to the State Of California to cause cancer and birth defects. Do not swallow; first aid: drink water to dilute product. May cause eye or skin irritation; first aid: flush eyes thoroughly with water.