



# The Elements

# PRODUCT DATA

## PRODUCT NAME DEFY Epoxy Fortified Wood Stain®

**MANUFACTURER**  
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## DESCRIPTION

DEFY Epoxy Fortified Wood Stain is a high performance semi-transparent finish that prevents the damaging effects of water, fungi, and UV radiation on exterior wood. It is a VOC-compliant epoxy resin which penetrates wood pores to block out water and provide long-lasting protection from weather damage. The product's excellent penetration helps eliminate surface buildup and peeling.

## USES

DEFY Epoxy Fortified Wood Stain can be used on interior or exterior wood surfaces including: wood siding, log homes, decks, fences, shake shingles, outdoor wood furniture, pressure-treated and all other natural wood surfaces. DEFY Epoxy Wood Stain is available in a wide variety of colors.

## BENEFITS

- Toughness and durability of Epoxy
- For all types of wood
- Resists flaking and peeling
- Soap and water clean-up
- Easy to maintain

## DIRECTIONS FOR USE

**Surface Preparation:** It is always beneficial to allow new wood to weather for 3 to 6 months to allow the wood's pores to open and take the stain better. Pressure treated wood must be allowed to weather for 3 to 6

months to adequately dry out.

**STRIP:** Do not use DEFY Epoxy Wood Stain over painted or varnished surfaces. These surfaces must be stripped using DEFY Exterior Wood Stain Stripper prior to application of the product.

**CLEAN:** Wood surfaces must be clean, porous, and dry before applying DEFY Epoxy Wood Stain. Use DEFY Wood Cleaner® to remove mill glaze, mildew, graying and other foreign matter that might block surface pores and interfere with product penetration. Rinse thoroughly with garden hose or pressure washer (maximum 1200 p.s.i.). DEFY Wood Cleaner will darken redwood and some types of cedar; however, this darkening will disappear once the wood is treated with DEFY Wood Brightener.

**BRIGHTEN:** While surface is still wet from cleaning, use DEFY Wood Brightener to neutralize the wood, restore the wood to its natural color, and open the pores of the wood, allowing the stain to be more easily absorbed.

## APPLICATION

**WEATHER CONDITIONS:** Surface and air temperatures should be between 45°F and 95°F. **Avoid application in direct sunlight.** Although surface may be slightly damp, do not apply to wet or water saturated surfaces, or when rainfall is expected within 12 hours.

**WATER TEST:** After allowing the wood to thoroughly dry from cleaning and brightening, sprinkle a few drops of water on the wood. It should soak in within a few seconds. If it doesn't, then don't apply the stain. The wood is either not dry enough or not porous enough to accept the stain correctly. Test a small area before starting general application to assure desired results.

**MIX WELL:** Shake or stir contents before and periodically during use.

To ensure absolute color uniformity from container to container, mix at least one third of the product from a used container with the contents of a new one. Do not thin product.

**PROTECT ADJACENT AREAS:** Use plastic, cardboard, and/or drop cloths to protect all adjacent non-targeted surfaces such as siding, windows, masonry, plant life, etc. from overspray and runoff.

**USE THE RIGHT EQUIPMENT:** Hand brushes should be high quality nylon or polyester. A pad applicator or deck brush may also be used. For large areas a pump-up or an airless sprayer may be used. If using an airless sprayer, use tips between .011 and .015, and use the lowest pressure that achieves a uniform spray pattern to minimize fogging and overspray. When spraying, always back brush to ensure a uniform application, and to break the surface tension of the wood so the stain will penetrate deeper and last longer.

**DECKS:** Start by applying DEFY Epoxy Wood Stain to the outside of railings (use a drop cloth under railings to prevent a buildup of DEFY on horizontal surfaces), benches, and undersides of upper level decks (only one coat is required on undersides). Once underside is treated, immediately brush out all overspray, drips, etc. on top of deck. Treat horizontal surfaces last.

**HORIZONTAL SURFACES:** On horizontal cedar, mahogany, and other dense woods, apply only one coat of stain. For pressure treated lumber and other porous woods apply two coats, waiting approximately 20 minutes between coats. It is very important to not let the first coat dry completely before applying the second coat. Brush product into surface working out all drips, puddles, or areas of overspray before product dries. Do not over apply

EPOXY FORTIFIED WOOD STAIN

stain. To avoid the possibility of peeling, apply only as much stain as the wood can easily absorb. A sure indication of over application is a shiny finish. Complete entire sections or to a natural break before allowing to dry. Never break in the middle of a board as it will cause unsightly color variations. Thoroughly coat the ends of boards or logs to prevent water penetration. All surface checks on logs should be thoroughly coated.

**VERTICAL SURFACES:** Start from the bottom and work up. Treat the entire length of a board before moving up. If necessary, brush or feather in to avoid lap marks. Brush in product before it dries and work out drips, runs, or overspray.

**WOOD SHINGLES:** Clean and test for porosity. Apply two, heavy saturation coats. Depending on porosity, a third coat may be necessary to achieve total saturation. Back brush between coats to ensure a uniform application. Brush out all drips and puddles. To avoid restart lines, start at the bottom and treat entire length before moving up.

**DRY TIME:** To touch, 2 to 4 hours depending on temperature and humidity. Allow 24 hours for deck to dry before using.

**NOTE:** The "wet" color of DEFY Epoxy Wood Stain has a cloudy/milky appearance but will dry to a beautiful, semi-transparent finish.

**CLEAN-UP:** Clean tools and equipment immediately after use with soap and water.

**COVERAGE:** With two coats, one gallon of DEFY Epoxy Wood Stain will cover approximately 100-150 sq. ft., depending on wood texture and porosity.

## MAINTENANCE

Occasional cleaning with mild detergent and water will generally restore treated surfaces to their original appearance. For maximum protection a light maintenance coat is recommended when wood begins to fade. To test to see if the wood has weath-

ered sufficiently to receive a maintenance coat, simply sprinkle water on the surface of the wood. If the water is easily absorbed within 1 - 2 seconds, the stain has weathered sufficiently to be recoated. To minimize darkening when applying a maintenance coat, first brighten with **DEFY Wood Brightener**. Recoat horizontal surfaces every 18 - 36 months, depending on foot traffic and environmental conditions. Vertical surfaces should be treated every 4 - 7 years or before wood starts graying.

If the surface has been allowed to weather to the point of graying, or if significant darkening has occurred over time and cannot be adequately brightened, the stain should be removed using **DEFY Stain Stripper** and re-stained with **DEFY Epoxy Fortified Stain** per original application instructions.

## CAUTIONS

**Keep out of reach of children!**

Do not take internally. Avoid contact with eyes and skin. Avoid breathing mist. Close container tightly after each use. Do not re-use containers.

**First Aid:** External: Wash skin with soap and water. Eye contact: Immediately flush with clean water for 15 minutes. Consult a physician. Internal: If swallowed, give two (2) glasses of water, induce vomiting. Call a physician or poison control center immediately.

## LIMITED WARRANTY

Our recommendations for use of this product are based upon tests believed to be reliable. Since field conditions vary widely, the user must determine the suitability of the product for the particular use and specific method(s) of application. Due to the fact that SaverSystems has no control over surface preparation and application methods, no guarantee as to the results is offered, expressed or implied. SaverSystems warrants this product to be free from defects. SaverSystems' liability shall be limited in all events to supplying enough product to re-treat

the specific areas to which defective product has been applied.

This warranty does not include the cost of labor for application. SaverSystems shall not have any other liability including direct, incidental, or consequential damages. Some states do not allow the exclusion of incidental or consequential damages so this limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

## PACKAGING

Available in 1 and 5 gallon recyclable plastic containers.

## TRANSPORT AND STORAGE

DEFY Epoxy Fortified Wood Stain is not considered hazardous under Department of Transportation regulations. Do not stack pallets.

**Keep product from freezing.**

## PHYSICAL PROPERTIES

Composition . . . . . Epoxy and synthetic resin blend  
Solvent . . . . . Water  
Specific gravity at 25° C. . . . . (.99)  
Density . . . . . (8.25 #/gallon)  
Flashpoint . . . . . none  
VOC Content . . . . . less than 250 gr/ltr  
Freeze/thaw stability up to 5 cycles  
Shelf Life . . . . . 18 months in original sealed container

## TECHNICAL DATA

### Test Results:

**ASTM D5401:** Percent water absorption on wood treated with DEFY <1%.

**ASTM G53:** Accelerated weathering (QUV) 2,500 hours. Excellent color retention; no loss in water repellency.

**Outdoor Exposure:** Indiana and Florida test fences. Excellent color retention, no loss in water repellency.