

# WOOD JUICE™

## “The Dry Wood Stabilizer”

WOOD JUICE is a compound of modified polymers. It is formulated to penetrate and stabilize dry to semi-dry wood.

WOOD JUICE works by completely saturating the wood and displacing the remaining water. Once the wood dries, the WOOD JUICE leaves a thin coating on the cell walls of the wood. This process keeps the cells from shrinking, which reduces future cracking, checking and irregular drying. Shrinkage is reduced up to 500% depending on the orientation of the wood grain and how dry the wood is prior to treating with WOOD JUICE.

WOOD JUICE is non-toxic, non-hazardous, does not contain silicone, will not discolor the wood, is non-hygroscopic (meaning it will not attract and retain water), will not oxidize, decompose or migrate in the wood when exposed to different degrees of temperature and relative humidity.

WOOD JUICE can be brushed on or the wood can be immersed (soaked) in WOOD JUICE (do not dilute). Although soaking is the preferred method, excellent results are still obtained by using the brushing method.

The following are some of the most common questions and answers relating to the use of WOOD JUICE.

### **Q: What is the difference between WOOD JUICE and PENTACRYL and how do I know which one to use?**

**A:** Both products are wood stabilizers. However, they are each formulated differently. PENTACRYL was developed to treat green or freshly cut wood. The wetter the wood, the better PENTACRYL will work.

WOOD JUICE is formulated to treat dryer wood with a lower moisture content. It is developed to compensate for the difference in the lower moisture of the wood.

When to use WOOD JUICE:

- **Low Moisture Content:** A general rule is to use WOOD JUICE if the moisture content in the wood is less than 25-30%.
- **Naturally Stable Wood:** WOOD JUICE can be used on some green wood that is stable by itself such as Basswood.
- **Thin Cuts of Wood:** Turned wood that has thin walls (such as bowls), wood that is carved thin or wood that is cut thin (such as veneer) is good for WOOD JUICE since much of the tension is relieved in these cuts.

- **Small Pieces:** WOOD JUICE can be used on small pieces of dry or green wood, such as Fruitwoods. Again, small, thinner pieces have less tension.
- **Older Wood:** Use WOOD JUICE on older wood that is dry and you would like to condition and rejuvenate it.

### **Q: How long will it take for the wood to dry when using WOOD JUICE?**

**A:** There is not a specific answer to drying time. Drying time differs depending on the original moisture content, temperature, relative humidity, type of wood and its thickness. If the piece is a turning that is finished thin, then it may be dry enough to apply a finish in 1-2 months. If the piece is large, like a carving or cross-cut section, it may take 1-2 years to completely dry. Note that the wood must be dried *slowly* (especially hardwood) in an unheated area away from direct sunlight and any air movement. To help slow the drying, wood can be placed in a cardboard box with the top loosely closed. Or cardboard can be cut and taped to the sides.

By displacing moisture in the wood, WOOD JUICE does help to speed up the drying process by up to 30%.

To help determine if the wood is dry, you can use a moisture meter (WOOD JUICE will not effect the reading). Keep in mind a moisture meter will only read the moisture content of the wood surface and is not a good indicator for measuring the inside of large pieces.

### **Q: Can wood treated with WOOD JUICE be finished with conventional finishes?**

**A:** Yes. Wood treated with WOOD JUICE can be finished with urethane varnishes, water based varnishes, lacquers, tung oil, linseed oil, and waxes - all have been successfully tested. The wood can also be stained with aniline dyes or oil stains. Be sure that the WOOD JUICE has *thoroughly dried* and to lightly clean the surface of the wood with a solvent, mineral spirits, or acetone before finishing. Be sure the solvent has dried prior to finishing the wood.

### **Q: Can a colorant be added to WOOD JUICE?**

**A:** Yes. A colorant can be added to WOOD JUICE. Aniline dyes, oil base dyes and stains, and pigments can be mixed with WOOD JUICE. The amount used depends upon the desired effect.

### **Q: Does WOOD JUICE absorb all the way through the wood?**

**A:** Yes, WOOD JUICE will absorb all the way through the wood. The time it takes depends upon the type and size of the wood. Keep in mind that most of the absorption is through the end grain. When using the brushing method, keep applying until the wood will no longer absorb WOOD JUICE. In between brushing applications, the wood should be wrapped in plastic in order to help absorption and

prevent premature evaporation. **Remove the plastic during drying** - this will allow the wood to breathe and prevent mold growth.

### **Q: How much WOOD JUICE should I use?**

**A:** The amount of WOOD JUICE absorbed into the wood will depend upon the type and size of wood. For very dense grained hardwoods, it will take as little as 1 ounce per board foot and for very soft open grained wood, it will take as much as 6 ounces per board foot. Refer to the wood calculator on our website to help determine the amount needed for your size and type of wood: [www.preservation-solutions.com](http://www.preservation-solutions.com)

### **Q: Does WOOD JUICE have to be absorbed all the way through the wood to be effective?**

**A:** In most cases, the wood should be completely saturated with WOOD JUICE. In some cases however, woods that are quite stable or a type of cut with less tension may only require several coatings to the surface, while other woods with wild grain, a lot of tension, or those that are unstable such as fruitwoods, require full saturation. The individual user will have to determine whether or not to completely saturate the wood.

### **Q: Can too much WOOD JUICE be applied?**

**A:** No, too much cannot be applied. The wood will only absorb so much. After treatment, any excess can be cleaned off the surface with solvent or mineral spirits. *Note: If using the soaking method, any WOOD JUICE left over in the soak can be reused on other wood.*

### **Q: How do I know when WOOD JUICE is done soaking?**

**A:** Using the soaking method, 2-3 days is generally sufficient for a piece 1-4 inches thick. It will not hurt the wood to soak it a little longer.

### **Q: Will wood treated with WOOD JUICE weigh more?**

**A:** Depending upon the type of wood, it will weigh only slightly more when the wood is dry. A cubic foot of wood will weigh approximately 10-12 ounces more than wood that was untreated.

### **Q: Will turning and carving be easier with wood treated with WOOD JUICE?**

**A:** Yes. The wood will turn and carve easier because WOOD JUICE also acts as a lubricant for your tools until it dries. Note that before sanding, the wood should be completely dry. If the sand paper clogs up or is gummy, it is an indication that the wood is not yet dry.

**Q: Will WOOD JUICE stabilize rotted or spalt wood?**

**A:** Yes. WOOD JUICE will stabilize rotted or spalt wood. However, it will not harden soft areas. See information on POLYCRYL for hardening soft areas of spalted or punky wood.

**Q: Does WOOD JUICE change the color of the wood?**

**A:** In some cases, it may alter the color slightly, however, it usually just enhances the wood grain more while leaving it looking natural.

**Q: Can wood treated with WOOD JUICE be glued?**

**A:** Yes, wood treated with WOOD JUICE can be glued. Tests have been successful using carpenter's glue, cyanoacrylates, and epoxies. The shear strength, however, has not yet been determined. Again, if needed, it is **important** to clean the wood surfaces with solvent or mineral spirits and be sure that the solvent has completely evaporated (dried) prior to gluing.

**Q: Can WOOD JUICE be used on bowls and eating utensils?**

**A:** Although WOOD JUICE is considered non-toxic, it is not registered as food grade. Therefore, we cannot recommend or endorse that it be used on items intended for use with food.

**Q: If WOOD JUICE freezes, will it lose its properties?**

**A:** No. WOOD JUICE has been run through 16 freeze-thaw cycles, some solids may settle out after being frozen 2-3 times, but will readily disperse when brought back to room temperature and shaken well.

**Q: Will WOOD JUICE keep the bark on?**

**A:** It will help. Since WOOD JUICE will reduce the shrinkage of the wood, it will help to keep the wood from pulling away from the bark. However, there is no guarantee that the bark will stay on. For best results to keep bark on, the tree should be cut during the dormant period (winter) when the sap stops running and the wood has hardened off.

**Q: Can wood treated with WOOD JUICE be woodburned?**

**A:** Yes. WOOD JUICE treated wood can be woodburned, however, it is recommended that the wood be completely dry after being treated with WOOD JUICE prior to wood burning.

**Q: Does the odor of WOOD JUICE remain in the wood once the wood has dried?**

**A:** 95% of the odor will dissipate. The time it takes depends upon the size and type of wood and the length of time it takes for the wood to completely dry.

**Q: What can I use to clean brushes that were used to apply WOOD JUICE or to clean up a spill?**

**A:** WOOD JUICE can be cleaned off/up with soapy water, or any mineral solvent.

## ADDITIONAL WOOD TREATMENT PRODUCTS

### END GRAIN SEALER

END GRAIN SEALER is a non-toxic wax emulsion that is applied to the end grain of green wood or the face grain of turning blanks or carvings. Since up to 70% of the drying is through the end grain of the wood, it is beneficial for slowing down and evening out the drying of green wood.

This product can be used on logs, timbers, lumber, turning blanks carvings and other green wood items.

END GRAIN SEALER can also be applied to wood that has been treated with PENTACRYL, WOOD JUICE or LOG & BEAM TREATMENT. This will help during the drying process.

### EXTERIOR WOOD SEALER

This is a sealer with low VOCs, made for use on exterior wood. When applied after using our wood stabilizer products, it will prevent the product from leaching out over time, while still allowing the wood to breathe. Especially beneficial during the drying of the larger wood pieces

### LOG & BEAM TREATMENT™

This product was specifically designed for use on larger logs, beams and timbers to reduce or eliminate cracking, splitting, checking and/or warping caused by shrinkage as the wood dries. It is great for use on log homes, post & beam or timber frame homes and structures. Popular for treating wood accent pieces, log archways and stairs.

LOG & BEAM TREATMENT will penetrate deep and will not darken the wood. It contains a UV protectant. Formulated for use on interior wood, but can be used on exterior logs or timbers, as long as the wood is sealed to prevent it from leaching out in the weather. Available in 1 gallon size or larger.

### PENTACRYL™

Our most popular product! Used to stabilize green wood. It displaces the moisture in the wood and coats the wood cells. This prevents the wood from shrinking while it dries, which significantly reduces the cracking and checking. PENTACRYL contains a UV protectant.

### POLYCRYL™

This is a concentrated, high molecular weight acrylic polymer that will fill and strengthen soft or spalted wood. It will dry clear and will not yellow. POLYCRYL is water-soluble and penetrates best when the wood is wet. It will help make carving and turning easier by fortifying the soft areas of the wood.

Penetration varies depending on the density of the wood. Note that it will not penetrate the hard areas of wood.

Since POLYCRYL is water-based, a finish will need to be applied to prevent the product from leaching out.

Our wood products are available in the following quantities:

Quart • Gallon • 5-Gallon Container  
30-Gallon Drum • 55-Gallon Drum

Developed and Manufactured in the U.S.A. by

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