

PERNAMBUCO™ WATERBORNE PRE-STAIN CONCENTRATES

The Pernambuco™ line of waterborne pre-stain concentrates was developed specifically for pressure-treated lumber, both green and kiln-dried.

Stains in this series possess high dilution ratios (as high as 10:1 with water), excellent penetration, great economics, quick drying, and long-term color fade resistance. Vinyl binders make Pernambuco™ stains especially suited to use with wood preservatives in the pressure-treating process; they also enable the stain to resist cracking more effectively than typical stains with acrylic binders. Specialty surfactants improve stain penetration and reduce drying time. Deeper penetration and quicker drying result in better adhesion, longer color retention, earlier stacking, reduced back-side blotchiness, and further resistance to deleterious effects of preservative chemicals. The excellent adhesion provided by these surfactants makes Pernambuco™ stains able to be used successfully on green, non-kiln-dried lumber. Stained wood can be pressure-treated in as few as 24 hours

PHYSICAL CHARACTERISTICS

Values differ for different colors

Weight per gallon:	10 - 14 lbs
% Solids by Weight:	40 - 60
% Solids by Volume:	25 - 45
pH:	8.3 - 9.3
Viscosity — Brookfield:.....	400cps
Flash Point (closed cup):.....	none
Spread Rate, concentrate:.....	1500 - 2500 sq ft/gal
Material VOC:	0.1 - 0.5 lbs/gal
Coatings VOC (water):	0.1 - 0.5 lbs/gal

after application under dry conditions but, as a general recommendation, a wait of 72 hours is advisable.

Available in a range of colors, these stains are applied to wood prior to pressure-treatment, by airless or assisted-airless spray, brush, roll, or vacuum coater. In a 2000-hour accelerated weathering test, a Pernambuco stained product showed exceptional color retention.

Stains in this series contain a high percentage of iron oxide, along with vinyl binders and specialty surfactants. These ingredients offer:

- High dilution ratios — as high as 10:1
- Excellent penetration
- Great economics
- Improved back-side blotch resistance
- Quick drying properties
- Long-term color fade resistance.

Pernambuco™ stains are:

- Ultra-low VOC
- Ready for pressure-treating in as little as 24 hours



AntiBlu®

WOOD PROTECTION PRODUCTS

USE RECOMMENDATIONS

Because of the extraordinarily high level of protective iron oxide in Pernambuco™ formulations, there are important mixing and application steps that need to be followed in order to achieve good color penetration and uniformity.

Concentrate storage

Concentrates are stable and homogenous for up to one year if stored properly. For best results, Pernambuco™ stain concentrates should be used in six months. Concentrates should be stored out of direct sunlight and protected from freezing in winter months. Some separation and soft settling is normal.

Concentrate mixing

Pernambuco™ stain concentrates need to be mixed thoroughly prior to dilution and use. Mixers need to be strong enough to create a small vortex in the concentrate tote. Typically, 20-30 minutes of mixing will suffice. It is important that the mixer shaft reach the bottom of the tote in order to ensure adequate mixing. Concentrates need only be mixed just prior to use. Although many lighter colored Pernambuco™ stains require only minimal concentrate mixture, certain colors and formulations may require special attention.

Dilute stain storage

Once Pernambuco™ Stain Concentrates have been diluted, constant agitation is necessary during application. Pigments tend to fall out of solution (either to cream and/or to settle, depending on the pigment). Surfactants and other additives in the stain formulations are designed to minimize these issues, but proper agitation is required to keep pigments properly suspended. Pigment fallout is the number one reason for color inconsistency.

It is important to check dilute stains for settling before use, particularly if the working solution has been idle: after shift changes, weekends, holidays, etc. Check the tote and holding tank bottoms for settling and make sure the Pernambuco™ stain is properly mixed prior to use.

Stain pigments can build up on the bottom of containers causing color issues. Dilute stain agitators need to reach within 2 inches of the bottom of day tanks and dilute stain totes.

Dilute stain application

Dilute stains can be applied by vacuum coater, spray or flood coat.

Excess stain must be removed prior to stacking treated wood. Excess stain remaining on boards can lead to back-side blotchiness. A combination of air knives and back-brushes tend to do the best job of removing excess stain.

The mechanical removal of excess stain minimizes pooling, blotchiness, color inconsistency and poor penetration. Delaying block stacking by 5-10 minutes improves penetration and color consistency on back sides. The most beneficial delay time depends on amount of excess stain, the application method, and the wood moisture content.

Air movement and or heat reduce the set time for the stain and shorten processing time.

NOTES

Read the MSDS before using Pernambuco™ stain products.

These products are not considered a hazardous waste under current RCRA regulations. They also do not contain, nor are they manufactured using, ozone-depleting substances as listed under Section 611 of the Clean Air Act.