

PRODUCT DATA SHEET

STA BRITE® P

PRODUCT DESCRIPTION

Sta Brite® P is a water-dispersible formulation containing 3-Iodo-2-Propynyl Butyl Carbamate (IPBC) for the control of sapstain and mold on both hardwoods and softwoods. Sta Brite P may be applied by dip, spray or flow-coat on fresh-cut lumber. Sta Brite P contains, as an integral component, a corrosion inhibitor; thus no buffering is required. Sta Brite P is a one-component system and may be used with insecticides, such as X-Lance®, for insect control.

GENERAL USE GUIDELINES

Remove sawdust and other debris from application apparatus daily to maintain maximum solution effectiveness. Freshly-treated lumber and treatment solutions should be protected from rain.

As a general guideline, for best control of mold and stain, the diluted (ready-to-use) liquid fungicide solution should be applied as soon as possible after sawing. In no case should more than 48 hours elapse between sawing and treatment of the wood. This is most important in situations where weather conditions are favorable for fungal growth.

Otherwise, fungal attack may extend below the wood surface, beyond the reach of a surface fungicide treatment.

In warm weather and/or in high humidity situations, it is advisable to retreat lumber after four weeks, especially when dead piled.

TYPICAL USE RATES

This product is a concentrate; you must dilute with water prior to use. Dilution rate will depend on biological stress, temperature, humidity, and application method. Less active ingredient is needed per board foot when climate is cool and control for short-term periods is desired. Increased solution concentrations should be used when stress level is high or when it is necessary to minimize sapstain in fresh-cut lumber.

Smooth-surfaced lumber normally retains half as much fungicide solution as rough-cut wood and hence needs a stronger concentration than Base Strength to deposit the necessary amount of fungicide.

DOSAGE

| STAIN CONDITIONS | DIP | CROSS-THE-CHAIN | ULV |
|------------------|-------|-----------------|------------------------------|
| | VAT | VAT | SPRAYER (deposition rate) |
| Low | 1:150 | 1:150 | 7-10 ug/cm ² |
| Moderate | 1:100 | 1:100 | 10-12 ug/cm ² |
| High | 1:75 | 1:75 | 12-25 ug/cm ² |

INDEPENDENT TEST RESULTS

Sta Brite P has been evaluated by independent testing laboratories world-wide and major forest products universities within the U.S. and Canada. In addition to the following summary table below, complete reports are available. (See references).

The following is a summary of results of three commercial treatments on four species of lumber.

Rating Scale

Smaller values indicate better control. Values of 5 indicate no control. Sample boards were evaluated at 1-month and 2-month intervals. Compositions of products tested are available upon request.

Mississippi Forest Products Laboratory January 15, 1991

| <u>Treatment</u> | <u>PINE</u> | |
|-----------------------|---------------|---------------|
| | <u>30 day</u> | <u>60 day</u> |
| *Control | 4.42 | 4.79 |
| Busan® 1009 1:150 | 1.06 | 2.19 |
| SA-1 1:100 | 1.38 | 2.25 |
| Sta Brite® P 1:100 | 0.38 | 1.75 |

| <u>Treatment</u> | <u>POPLAR</u> | |
|-----------------------|---------------|---------------|
| | <u>30 day</u> | <u>60 day</u> |
| *Control | 3.19 | 3.92 |
| Busan 1009 1:150 | 0.00 | 0.44 |
| SA-1 1:100 | 0.44 | 0.81 |
| Sta Brite® P 1:100 | 0.31 | 1.00 |

*An average of 3 sets of controls, each averaging 8 boards.

Rating: 5 = 100% stain

0 = 0% stain

**SA-1 - a mixture of 7.6% IPBC & 64.8% DDAC

| <u>Treatment</u> | <u>SWEETGUM</u> | |
|----------------------|-----------------|---------------|
| | <u>30 day</u> | <u>60 day</u> |
| *Control | 2.36 | 3.15 |
| Busan 1009 1:150 | 0.00 | 1.19 |
| SA-1 1:100 | 0.00 | 0.25 |
| Sta Brite P 1:100 | 0.00 | 0.31 |

| <u>Treatment</u> | <u>OAK</u> | |
|---------------------|---------------|---------------|
| | <u>30 day</u> | <u>60 day</u> |
| *Control | 1.52 | 2.21 |
| Busan 1009 1:150 | 0.06 | 0.56 |

| | | |
|----------------------|------|------|
| SA-1 1:100 | 0.25 | 0.63 |
| Sta Brite P 1:100 | 0.00 | 0.00 |

*An average of 3 sets of controls, each averaging 8 boards.

Rating: 5 = 100% stain

0 = 0% stain

**SA-1 - a mixture of 7.6% IPBC & 64.8% DDAC

**USDA
Forest Products Lab
6 month Exposure Test
Vicksburg, MS**

| Treatment | Dilution Rate | Average Discoloration* | | | Red Oak |
|-------------|------------------|------------------------|----------|----------|---------|
| | | Pine | Y.Poplar | Sweetgum | |
| Control | | 4.0 | 4.0 | 4.0 | 2.1 |
| Busan 1009 | 1:150 | 1.0 | 2.4 | 1.0 | 1.0 |
| SA-1 | 1:100 | 1.0 | 1.7 | 1.4 | 1.0 |
| Sta Brite P | 1:100 | 1.0 | 1.0 | 1.0 | 1.0 |

*Legend: Mold/stain based on following scale -

- 1 - Clean
- 2 - Light Stain
- 3 - Moderate Stain
- 4 - Heavy Stain

MONITORING SOLUTION STRENGTH

Solution strength of Sta Brite P solutions should be monitored on a daily basis. Test kits are available to determine solution strength at the treating site.

AGITATION

This product should be agitated in bulk dip vats or in other application equipment. Agitation is best achieved by use of a low-shear, positive displacement pump. Prior to chemical use, agitate tank until all material is in solution.

CORROSIVITY

Results of static tests of ready-to-use solutions of Sta Brite P versus NP-1® resulted in 40 times less corrosion with Sta Brite P.

LEACHABILITY

Sta Brite P binds readily to wood substrates. Rainfall leaching tests indicate that less than 1 ppb (part per billion) of applied chemical can be removed by rainfall leaching.

COMPATIBILITY

Sta Brite P may be used in conjunction with insecticide formulations labeled to prevent infestation of wood with beetles and wood-infesting or wood-destroying insects. This product is compatible with products having, as an active ingredient, chloropyrifos, permethrin and other water-reducible insecticides such as X-Lance®. Sta Brite P is not compatible with pH adjustors such as borax, Adjust-O-Bor or Buffer-Up 14.

TANK CONVERSION

Tank conversion is best accomplished by emptying previous formulations and removing all debris present as tank residue. For non-concrete tanks, coating with a suitable sealer is recommended prior to charging with Sta Brite P. For assistance during tank conversion, please contact ISK Biocides, Inc. or their authorized agent.

HANDLING AND STORAGE**KEEP OUT OF REACH OF CHILDREN**

Do not handle until all safety precautions have been read and understood. See product label and Safety Data Sheet for hazards and precautions.

Observe good personal hygiene practices. Change protective gloves/clothing when signs of contamination appear.

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Mix contents before using. Do not allow to freeze.

For product emergency, call Chemtrec at 800-424-9300

TECHNICAL DATA

| PHYSICAL DATA | | INGREDIENTS | |
|------------------|-----------------------------|-----------------------------------|--------|
| Flashpoint | 122° F. PMCC | 3-Iodo 2-Propynyl Butyl Carbamate | 6.0% |
| Appearance | Clear, Amber Liquid | Other Ingredients | 94.0% |
| Weight/Gallon | 8.08 lbs/gallon | | 100.0% |
| pH | 6.0 - 7.0 | | |
| Corrosivity | Non-corrosive to mild steel | | |
| Specific Gravity | 0.97 | | |

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants to those persons lawfully acquiring title to this product that at the time of the first sale of this product by seller this product conformed to its chemical description and that it was reasonably fit for the purposes stated on the product label when used both in accordance with the Directions for Use appearing on the product label and under normal conditions of use. Buyers and users of this product assume the risk of all loss or damage from use or handling of this product that results from their failure to read and comply with the Directions for Use of this product, which appear on the product label. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. Unless expressly prohibited by state law, the liability of seller for any breach of warranty shall not exceed the purchase price of the product as to which a claim is made.

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