

PRODUCT DATA SHEET

PREMIER®

PRODUCT DESCRIPTION

PREMIER® is an effective, water-emulsifiable formulation containing Propiconazole and 3-Iodo-2-Propynyl Butyl Carbamate (IPBC) for the control of sapstain and mold on both hardwoods and softwoods. PREMIER may be applied by spraying or dipping fresh-cut lumber for sapstain control. PREMIER is a corrosion inhibitor; thus no buffering is required. PREMIER is a one-component system and may be used with insecticides, such as X-Lance®, for insect control.

GENERAL USE GUIDELINES

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.

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.

TYPICAL USE RATES

Premier is a concentrate; you must dilute with water prior to use. Dilution rate will depend on biological stress, species of lumber, temperature, humidity, and application method. Less active ingredient is needed per board foot when climate is cool and short-term control is desired. Increased solution concentrations should be used when stress level is high or with more susceptible species (i.e. poplar and southern yellow pine).

DOSAGE

STAIN CONDITIONS	BULK DIP	ACROSS-THE-CHAIN VAT		ULV SPRAYER (IPBC dep. rate*)
Low	1:200		1:150-200	8 - 12 $\mu\text{g}/\text{cm}^2$
Moderate	1:125		1:100-125	10 - 15 $\mu\text{g}/\text{cm}^2$
High	1:50-75		1:50-75	15 - 25 $\mu\text{g}/\text{cm}^2$

*Corresponding deposition rates of Propiconazole would be half this amount.

INDEPENDENT TEST RESULTS

PREMIER has been evaluated by independent testing laboratories, sawmills and test sites worldwide with outstanding results.

The following is a summary of results of three tests.

Test One:

Location: South Florida – Miami area

Time Frame: 10/2001 – 12/2001

Rating Scale 0 - 10

Larger values indicate better control. Values of 0 indicate no control. Sample boards were evaluated at two months.

**South Florida Test Service
December 2001**

OAK

<u>Treatment</u>	<u>8 Weeks</u>
1.0% Premier	8.8
1.0% SA-1*	8.4
1.0% Sta Brite® P	8.6
1.0% NeXgen® + 0.25% NeX-Brite®	9.7

POPLAR

<u>Treatment</u>	<u>8 Weeks</u>
1.0% Premier	7.9
1.0% SA-1	6.3
1.0% Sta Brite P	6.3
1.0% NeXgen + 0.25% NeX-Brite	8.4

An average of 10 boards.

Rating: 0 = 100% stain
 10 = 0% stain

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

Test Two: Denmark, SC

Time Frame: 2000

Rating Scale 0 - 10

Larger values indicate better control. Values of 0 indicate no control. Sample boards were evaluated at two months.

PINE

<u>Treatment</u>	<u>6 Weeks</u>
1.0% Premier	6.9
1.0% Premier + 0.125% ISK-1	7.2
1.0% Sta Brite P	6.9
1.0% NeXgen + 0.25% NeX-Brite	8.5
1.0% NeXgen	8.0

*An average of 15 boards.

Rating: 0 = 100% stain
 10 = 0% stain

Test Three: Edgeville, SC

Time Frame: 2000

Rating Scale 0 - 10

Larger values indicate better control. Values of 0 indicate no control. Sample boards were evaluated at two months.

POPLAR

<u>Treatment</u>	<u>6 Weeks</u>
1.0% Premier	3.9
1.0% Premier + 0.125% ISK-1	6.1
1.0% Sta Brite P	2.4
1.0% NeXgen + 0.25% NeX-Brite	8.2
1.0% PQ-8® +1% Borax	6.3

*An average of 15 boards.

Rating: 0 = 100% stain
 10 = 0% stain

MONITORING SOLUTION STRENGTH

Development work continues on a field test kit to determine Premier solution strength. In the meantime, it is recommended that constant amounts of Premier concentrate be added to ensure adequate solution strength. Consult with your ISK representative for recommended amounts of Premier to be added. Analysis of dip vat solutions by ISK Biocides, Inc. laboratory is available and recommended. Contact your sales rep or customer service rep for sample containers and procedures.

MONITORING pH

If using a brightener (NeX-Brite) with Premier, it is always recommended to maintain the pH at or above 3.0. Test strips to determine pH are available from your ISK Biocides, Inc. sales rep or customer service rep to test and maintain the pH of the dip vat solution.

AGITATION

Agitation is not required to disperse Premier; however, it is always good practice to agitate your working solution. Premier can be easily agitated in dip vats or in other application equipment. ISK will provide an appropriate agitator upon request.

CORROSIVITY

Results of static tests of ready-to-use solutions of Premier versus NP-1[®] resulted in 40 times less corrosion with Premier. One percent Premier in water ready-to-use solution was less corrosive than water alone on mild steel coupons in similar tests. Storage of the concentrated product at elevated temperature storage (122° F), however, will significantly corrode mild steel in about four months. Store concentrate only in its original container.

LEACHABILITY

The active ingredients in Premier bind readily to wood substrates.

COMPATIBILITY

Premier 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, permethrin and other synthetic pyrethroids, such as X-Lance[®].

TANK CONVERSION

Tank conversion is always best accomplished by emptying previous formulations and removing all debris present as tank residue; however, the broad compatibility of Premier makes conversions from most products an easy process. For mild steel tanks, coating with a suitable sealer is recommended prior to charging with any sapstain product to reduce iron in your dip solution and possible discoloration of lumber. For assistance during tank conversion, please contact ISK Biocides, Inc. for assistance when converting from one product to another.

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	>200°F PMCC	3-Iodo 2-Propynyl Butyl Carbamate	6.0%
Appearance	Clear, Amber Liquid	Propiconazole	3.0%
Weight/Gallon	8.4 lbs/gallon	Other Ingredients	94.0%
pH	6.0 - 7.0		100.0%
Corrosivity	Non-corrosive to mild steel		
Specific Gravity	1.01		

PACKAGING

270 - gal. Tote, 55 - gal. Drum, 5-gal. Pail

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.

All information contained in this bulletin is furnished by ISK Biocides, Inc. free of charge for your evaluation and is for informational purposes only. No guarantee, expressed or implied, is made by ISK Biocides, Inc. as to the results to be obtained based upon your use of the information. ISK Biocides, Inc. expressly disclaims any liability, foreseen or unforeseen, arising out of your use of the information. This information should not be treated as absolutely complete since additional information may be necessary or desirable when particular, exceptional or variable conditions or circumstances exist or because of applicable laws or government regulations. Nothing contained herein is to be construed as permission or as a recommendation to infringe any patent or trademark or violate any law or regulation.

Premier®, NeXgen®, NeX-Brite®, Sta Brite®, and X-Lance® registered trademarks of ISK Americas Incorporated.
 PQ-8® is a registered trademark of IBC Manufacturing Company.
 NP-1® is a registered trademark of Koppers Company, Inc.