

PRODUCT DATA SHEET

22 EXPRESS®

PRODUCT DESCRIPTION

22 Express® is an effective water emulsifiable formulation containing Propiconazole and Tebuconazole for the control of sapstain and mold on both hardwoods and softwoods. 22 Express may be applied by spraying or dipping fresh cut lumber for sapstain control. 22 Express is a one-component system and may be used with insecticides, such as X-Lance®, for insect control.

TYPICAL USE RATES

22 Express 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

| | BULK DIP | ACROSS-THE-CHAIN VAT | ULV SPRAYER (Propiconazole dep. rate*) |
|-------------------------|-------------|-------------------------|---|
| <u>STAIN CONDITIONS</u> | | | |
| Low | 1:135 | 1:100 | 1.9 - 3.7 µg/cm ² |
| Moderate | 1:90 | 1:67 | 2.8 – 5.5. µg/cm ² |
| High | 1:67 | 1:50 | 3.8 – 7.4 µg/cm ² |

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

TEST RESULTS

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

The following is a summary of results of a few of the trials.

Larger values indicate better control. Values of 0 indicate no control. Sample boards were evaluated at seven weeks.

**Test One:
Average of Data from South Florida Test Service
and
IBC Manufacturing Inc. Plant Test Location in Memphis, TN
Evaluation Date: January 15, 2016**

Dead Stacked and wrapped Southern Yellow Pine

| <u>Treatment</u> | <u>7 Weeks</u> |
|--------------------------------------|----------------|
| 1:100 22 Express | 78.3 |
| 1:100 PQ-8® | 83.6 |
| 1:100 Sta Brite® P | 86.0 |
| 1:100 22 Express & 0.25% Tuff-Brite® | 98.0 |
| 1:100 PQ-8 & 0.25% Tuff-Brite | 92.9 |

An average of 15 boards. Rating:

0 = 100% stain

100 = 0% stain

Test Two A:
Average of Data from South Florida Test Service
and
IBC Manufacturing Inc. Plant Test Location in Memphis, TN
Evaluation Date: September 27, 2016

Dead Stacked and wrapped Poplar

| <u>Treatment</u> | <u>7 Weeks</u> |
|-------------------------------------|----------------|
| 1:111 22 Express & 0.27% Tuff-Brite | 75.1 |
| 1:125 PQ-8 & 0.27% Tuff-Brite | 73.6 |
| 1:91 22 Express | 82.3 |
| 1:100 PQ-8 | 72.9 |

An average of 20 boards. Rating:
 0 = 100% stain
 100 = 0% stain

Test Two B:
Average of Data from South Florida Test Service
and
IBC Manufacturing Inc. Plant Test Location in Memphis, TN
Evaluation Date: September 27, 2016

Dead Stacked and wrapped Oak

| <u>Treatment</u> | <u>7 Weeks</u> |
|-------------------------------------|----------------|
| 1:111 22 Express & 0.27% Tuff-Brite | 84.6 |
| 1:125 PQ-8 & 0.27% Tuff-Brite | 82.7 |
| 1:91 22 Express | 73.4 |
| 1:100 PQ-8 | 72.3 |

An average of 20 boards. Rating:
 0 = 100% stain
 100 = 0% stain

Test Three:
Average of Data from South Florida Test Service
and
IBC Manufacturing Inc. Plant Test Location in Memphis, TN
Evaluation Date: April 18, 2017

Dead Stacked and wrapped Southern Yellow Pine

| <u>Treatment</u> | <u>7 Weeks</u> |
|---------------------|----------------|
| 1:125 Sta Brite P | 85.1 |
| 1:100 22 Express | 83.3 |
| 1:125 PQ-8 | 95.6 |
| 1:125 NeXgen® | 95.0 |
| 1:125 Workhorse | 88.2 |
| 1:125 Quattro XP 32 | 88.3 |

An average of 20 boards. Rating:
 0 = 100% stain
 100 = 0% stain

MONITORING SOLUTION STRENGTH

There is a Field Test Kit method for 22 Express. The test kit is based on a colorimetric change from Brown to Green. Consult with your ISK representative for recommended amounts of 22 Express 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

22 Express is corrosive to mild steel with an acidic pH. 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 22 Express; however, it is always good practice to agitate your working solution. 22 Express can be easily agitated in dip vats or in other application equipment.

CORROSIVITY

22 Express is a corrosive product and the concentrate should be stored only in its original container.

LEACHABILITY

The active ingredients in 22 Express bind readily to wood substrates.

COMPATIBILITY

22 Express 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. This product is compatible with brighteners such as NeX-Brite® and with other additives to enhance performance like Tuff-Brite that are sold by ISK Biocides.

TANK CONVERSION

Tank conversion is always best accomplished by emptying previous formulations and removing all debris present as tank residue. For mild steel tanks, coating with a suitable sealer is recommended prior to charging with any anti-sapstain product to reduce iron in the solution and possible discoloration of lumber. For assistance during tank conversion on specific compatibilities and methods, please contact ISK Biocides, Inc. for assistance when converting from one product to another.

PHYSICAL AND CHEMICAL HAZARDS

- Flammable liquid and vapor
- Harmful if swallowed
- Causes severe skin burns and eye damage
- May cause an allergic skin reaction
- Causes serious eye damage

STORAGE AND DISPOSAL

CAUTION:

Keep Out of Reach of Children

Do not contaminate water, food or feed by storage or disposal.

- **STORAGE:** Store in a secure, well-ventilated area protected from extreme temperatures. Do not transfer to unmarked containers. Keep container closed when not in use.
- **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.
- **CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Totes should be returned for recycling.

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

TECHNICAL DATA

PHYSICAL DATA

INGREDIENTS

| | | | |
|------------------|-------------------------|-------------------|--------|
| Flashpoint | 110°F (43°C) | Propiconazole | 1.47% |
| Appearance | Dark Translucent Liquid | Tebuconazole | 0.73% |
| Weight/Gallon | 8.53 lbs/gallon @ 68° F | Inert Ingredients | 97.8% |
| pH | 1.5 – 2.5 | | 100.0% |
| Corrosivity | Corrosive to mild steel | | |
| Specific Gravity | 1.024 @ 68° F | | |

PACKAGING

| | Net | Gross |
|-----------------|--------------------|--------------------|
| 270 – gal. Tote | 2303 lbs (1046 kg) | 2433 lbs (1129 kg) |
| 55 – gal. Drum | 469 lbs (213 kg) | 490 lbs (242 kg) |

FREIGHT DATA

Freight Classification: Preservative, wood n.o.i. NMFC 161490 sub 2

DOT Shipping

Description: UN 2924, Flammable liquid, Corrosive, n.o.s (Ethyl alcohol, Dodecylbenzenesulfonic acid), Class(es) 3.8, PG II

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 Direction 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. 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. **SELLER DOES NOT MAKE ANY OTHER WARRANTY AS TO THE QUALITY OF THE PRODUCTS SUPPLIED TO BUYER, OR OTHERWISE, EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT AND ON THE LABELS OF THE PRODUCTS. SELLER HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND EXPRESSLY DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES THAT MAY EXIST UNDER APPLICABLE LAW, COURSE OF DEALING OR USAGE OF TRADE.**

All information contained in this bulletin is furnished by ISK Biocides, Inc. free of charge and is intended for your evaluation. 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, nor does ISK Biocides, Inc. assume any liability arising out of your use of the information. Nor is the information to be construed 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.

22 Express®, X-Lance®, NeXgen®, NeX-Brite®, and Sta Brite® are registered trademarks of ISK Americas Incorporated.

PQ-8® is a registered trademark of IBC Manufacturing Company.

Workhorse® is a registered trademark of Kop-Coat, Inc.

AntiBlu® is a registered trademark of Arch Wood Protection, Inc.