

69529-2

03-01-2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Mr. Vincent Opaskar  
Quality Borate  
3690 Orange Place, Ste. 495  
Cleveland, Ohio 44122

MAR 1 2012

Subject: BoraSol-WP, EPA Reg. No. 69529-2  
Application Dated December 15, 2010  
Decision: 445745

Dear Mr. Opaskar:

The labeling referred to above, submitted in connection with registration under the Federal insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable

If you have any questions, you may contact Samantha Hulkower at (703) 603-0683 or Hulkower.Samantha@epa.gov.

Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records. If you have any questions, you may contact Samantha Hulkower at (703) 603-0683 or Hulkower.Samantha@epa.gov.

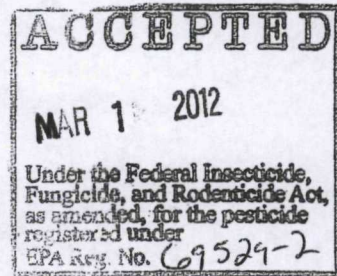
Sincerely,

A handwritten signature in black ink, appearing to read "Mark Suarez", with a large, stylized flourish at the end.

Mark Suarez  
Product Manager (13)  
Insecticide Branch  
Registration Division (7505P)

Enclosure: Label stamped "Accepted"

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**MASTER LABEL**

**BoraSol-WP™**

FOR PROTECTIVE AND PREVENTATIVE TREATMENTS OF WOOD AGAINST WOOD DESTROYING INSECTS AND WOOD DECAY FUNGI. FOR REMEDIAL CONTROL OF TERMITES, WOOD BORING INSECTS, FUNGAL WOOD DECAY IN INFESTED WOOD. FOR BRUSH, SPRAY, PRESSURE AND DIP-DIFFUSION TREATMENTS OF WOOD AND WOOD PRODUCTS .

**ACTIVE INGREDIENT:**

Disodium Octaborate Tetrahydrate (Na<sub>2</sub>B<sub>8</sub>O<sub>13</sub> • 4H<sub>2</sub>O).... 98%

**INERT INGREDIENTS:**..... 2%

**TOTAL:** 100%

**(Product contains 2% H2O-absorbed moisture)**

SUBLABLE A: Residential Users and Professional Pest Control Operators (PCO)

SUBLABLE B: Industrial Users such as Pressure Treaters and Dip Diffusion Operators

**Keep out of Reach of Children**

**Caution**

EPA Reg. No. 69529-2

EPA Est. No. 79740-ARG-001(Industrial)

85875-OH-001 (Residential)

Manufactured for Quality Borate Co., 3690 Orange Place, #495

Cleveland, OH 44122

Phone: 1-866-BORATES (866-267-2837)

**Net Contents:**

Residential Use and Professional Pest Control Operators (PCO):

1.5 lb. bag, 7.5 lb. bag, 11.25 lb. bag, 22.5 lb. bag

Industrial Use such as Pressure Treaters and Dip Diffusion Operators:

50 lb bag, 2000 lb Supersack

**SUBLABEL A: Residential and Pest Control Operators Usage**

FOR PROTECTIVE AND PREVENTATIVE TREATMENTS OF WOOD AGAINST WOOD DESTROYING INSECTS AND WOOD DECAY FUNGI. FOR REMEDIAL CONTROL OF TERMITES, WOOD BORING INSECTS AND FUNGAL WOOD DECAY IN INFESTED WOOD.

**BoraSol-WP™**

**ACTIVE INGREDIENT:**

Disodium Octaborate Tetrahydrate (Na<sub>2</sub>B<sub>8</sub>O<sub>13</sub> • 4H<sub>2</sub>O).....98%

**INERT INGREDIENTS:**..... 2%

**TOTAL:** 100%

(Product contains 2% H<sub>2</sub>O-absorbed moisture)

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

EPA REG. No. 69529-2

EPA EST.No. 85875-OH-001

NET CONTENTS: 1.5 lbs, 7.5 lbs, 11.25 lbs, 22.5 lbs

	FIRST AID
If swallowed	-Call poison control center or doctor immediately for treatment advice. -Have person sip a glass of water if able to swallow. -Do not induce vomiting unless told to do so by the poison control center or doctor. -Do not give anything by mouth to an unconscious person.
If in eyes	-Hold eye open and rinse slowly and gently with water for 15-20 minutes. -Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. -Call a poison control center or doctor for treatment advice.
If on skin or clothing	- Rinse skin with plenty of water for 15-20 minutes. -Take off contaminated clothing. -Call poison control center or doctor for additional treatment advice. Move person to fresh air.
If Inhaled	-If person is not breathing, call 911 or an ambulance, then give artificial

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	respiration, preferably by mouth-to-mouth, if possible -Call a poison control center or doctor for further advice.
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Have the product or label with you when calling a Poison Control Center or Doctor or going for treatment. In case of emergency, for additional information call (866-267-2837).

*For use by Individuals/Firms licensed or registered by the state to apply termiticide products. States may have more restrictive requirements regarding qualifications of persons using this product.*

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Harmful if swallowed. Avoid contact with eyes. Wash thoroughly after handling. Avoid contamination of food and feed. Do not leave container where children or animals may gain access.

**CAUTION**

**PERSONAL PROTECTION EQUIPMENT**

Applicators and other handlers must wear a long-sleeved shirt and long pants which cover the entire arm and leg skin surface, socks, water resistant boots, chemical resistant gloves, and chemical resistant protective eyewear – splash goggles are recommended. When applying this product in confined spaces such as crawl spaces and attics, a ventilation exhaust system is required. If this is impractical, the use of a NIOSH approved respirator designed for dusts/mists is required. Clean spills and over-spray with a clean damp cloth or use an absorbent. Dispose of spill as required by state guidelines and laws

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and wildlife. Do not contaminate water when cleaning equipment or disposing of equipment wash waters and rinsates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark.

**PHYSICAL OR CHEMICAL HAZARDS**

BoraSol-WP™ is stable a room temperature in closed containers under normal storage conditions. When heated it loses water and forms Boric oxide and Sodium oxide. Avoid high temperatures (> 250°F), dust generation and exposure to moist air or water. Reaction with strong reducing agents will generate hydrogen gas, which could create an explosion hazard.

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**DIRECTIONS FOR USE:** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read and follow all applicable directions and precautions on this label before using.

**Restrictions:**

- Exposed food should be covered or removed prior to the application.
- Do not apply to foamboard.
- Do not use in edible product areas of food processing plants or on counter tops and other surfaces where food is prepared.
- Do not use in serving areas where food is exposed.
- Do not contaminate feed, water or food.
- Do not use to treat lumber that will contact soil or be exposed to leaching by weather.
- This product can be tank mixed with other pesticide products.
- In the home, remove or cover exposed food, food handling surfaces, and cooking utensils. Wash thoroughly after treatment and before reuse.
- When spraying overhead interior areas of homes, apartments buildings, and all other dwellings, cover or protect all surfaces below the area being treated with plastic sheeting or other material which can be disposed of if contamination from dripping or splashing occurs.
- Children and pets should not be in treatment area until after application is completed.
- Do not treat pets with this product. Avoid contamination of feed and foodstuff. Avoid contamination of ornamental plants.

*Use of this product does not substitute for mechanical alteration, soil treatment or foundation treatment, but is merely a supplement that is used as a preventative or remedial treatment to protect treated wood only.*

**GENERAL INFORMATION**

BoraSol-WP<sup>TM</sup> is a water-soluble inorganic borate salt with termiticidal properties. BoraSol-WP<sup>TM</sup> is effective for the protection and remedial treatment of wood against wood-destroying organisms, including the target pests listed below. This product can be used for remedial treatment of wood infested with target organisms, for preventative treatment of wood in existing structures (before signs of infestation), for treatment of wood during construction.

BoraSol-WP<sup>TM</sup> will penetrate the wood to the heartwood, protecting the wood from termite and other wood destroying insects. BoraSol WP<sup>TM</sup> may be tank-mixed with an approved pesticide or an approved fungicide/moldicide for increased performance in fungus/mold protection on hard surfaces. BoraSol-WP<sup>TM</sup> will protect wood from both white rot and brown rot and other wood rot fungi. Tank mixing with other fungicides or pesticides must follow any label instructions and precautions.

**TARGET ORGANISMS**

BoraSol-WP™ is effective for treatment of wood (and wood-foam composite structural components) against wood-boring insects, other insects and wood decay fungi.

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| Subterranean Termites               | Powderpost Beetles              |
| Reticulitermes, Heterotermes,       | Lyctidae, Anobiids,             |
| Coptotermes (Formosan)              | Bostrichidae, Cerambycidae      |
| Dampwood Termites                   | Wood Decay Fungi                |
| Zootermopsis                        | Brown Rot (Geophyllum trabea)   |
| Drywood Termites                    | White Rot (Trametes versicolor) |
| Ants: Red Fire, Pharaoh, Argentine, | other wood rot fungi            |
| Carpenter Ants (Camponotus)         |                                 |
| German Cockroaches                  |                                 |
| Silverfish                          |                                 |

**This label is for End-Use Applications Only.**

**WOOD**

BoraSol-WP™ is recommended for wood materials in accordance with the specific treatment methods described below. BoraSol-WP™ is effective for interior and exterior wood (and wood-foam composite structural components) that will be protected from rain and not in direct contact with soil. Types of wood include, but are not limited to, all types of lumber, logs, and plywood. This product is toxic to wood-destroying insects, but surface etching of treated wood may occur.

**REMEDIAL AND PREVENTATIVE TREATMENT OF WOOD**

Remedial and preventative treatment of wood can be performed by BoraSol-WP™ powder, BoraSol-WP™ 15% water solution or BoraSol WP 15% water solution with 1-3% foaming agent. Each method of application depends on the Target Pest and the location of treatment.

**BoraSol WP Powder applications**

BoraSol-WP™ can be applied as a dust using a dusting applicator available at most pesticide supply houses. Apply powders to surfaces at a rate of 2-12 grams/sq.ft. in a uniform coating (dependent of the Target Organism).

**Preparation of 15% BoraSol WP solution.**

A 15% aqueous solution of BoraSol-WP™ is used for treatment. With good mixing, add 1.5 pounds of BoraSol-WP™ (disodium octaborate tetrahydrate, DOT) to .75 gal (3 quarts) of water for each gallon of treating solution that is required. Add water to bring the final volume up to a gallon. Mix until uniform. One gallon will treat 200 sq.ft. of surface area.

**Preparation of 15% BoraSol WP solution with Foaming Agent**

BoraSol-WP™ can also be applied as a wet foam for wall void areas. BoraSol-WP™ is compatible with most commercially available foams. Generally, 2-3 fl oz. of the foaming agent is required for each finished gallon of the 15% BoraSol-WP™. See mixing instructions from various suppliers of foaming agents and equipment.

**REMEDIAL APPLICATION OF BORASOL WP SOLUTION TO INFESTED WOOD**

A 15% BoraSol-WP™ Solution Treatment is used for remedial control of listed organisms attacking wood. For control of termites, Carpenter ants, and wood decay fungi, apply the 15% aqueous solution of BoraSol-WP™ by brush or spray until surface is thoroughly wet (1 gallon per 200 square feet). For adequate loading of the active ingredient per AWWPA (American Wood Preservation Association) specifications, treatment must be conducted a second time (or even a third time for Dampwood or Formosan Termites) after the surface has dried. A single coat of 15% BoraSol-WP™ solution at 200 sq.ft./ gallon, will give 0.15 lbs/cu.ft. of the active ingredient (DOT) to 0.6 inch depth of the sprayed surface. Wood that is dry (<17% moisture content) will not easily absorb the BoraSol-WP™. To increase the penetration of the BoraSol-WP™ solution, spray the wood with clean water and then apply the 15% BoraSol-WP™ Solution when the wetted wood is "dry" to the touch.

Where entry/exit holes from beetles, termites or ants are evident, application must be made by drilling and then injecting the solution under pressure into infested wood or until run-off is observed. A surface application of the 15% solution will increase the loading of the BoraSol-WP™ in the wood and increase its effectiveness. This product must be applied only to treat bare wood, plywood, and particleboard, where an intact water repellent such as paint, stain, or a sealer is not present. Be sure to check the wood for structural integrity as this product does not enhance or provide structural integrity to treated wood.

Treatment must result in retention listed in the AWWPA Book of Standards, of 0.17 lb/ft<sup>3</sup> (2.8 kg/m<sup>3</sup>) B<sub>2</sub>O<sub>3</sub> or 0.26 pcf DOT (4.2 Kg/m<sup>3</sup>) against Non-Formosan termites. Formosan termites require 0.28 lbs/ft<sup>3</sup> B<sub>2</sub>O<sub>3</sub> (4.5 Kg/m<sup>3</sup>) or 0.42 pcf DOT (6.7 Kg/m<sup>3</sup> DOT).

A 15% solution of BoraSol-WP™ with foaming agent can be used for remedial control of wood destroying organisms such as termites, Carpenter ants, and wood decay fungi. Inject the foam inside wall cavities or overhead surfaces with a delivery wand such that all wood surfaces in a cavity are contacted with the foam. One fl.oz. of 15% BoraSol-WP™ converted to foam will treat a cavity 14.5" x 3.5" x 24".

For treating infested wood thicker than 2 inches, the BoraSol-WP™ solution or BoraSol-WP™ powder must be injected into the wood in addition to the liquid spraying of the surface area. Injection holes (1/8<sup>th</sup> inch in diameter) must be drilled in the area of

suspected infestation. Drill 1/8<sup>th</sup> inch delivery holes every 4 inches across the grain (e.g. sill plate) and every 12 inches in a "standing" or vertical joist. Press and hold the injection tip firmly into each hole and inject solution or powder until runoff or powder is observed from other holes or galleries.

Do not use this product on wood that may come in contact with the soil or exposed to rain and moisture. BoraSol-WP<sup>TM</sup> solutions are compatible with steel, stainless steel, brass and all plastic components of spray equipment. Equipment should be rinsed with clear water to flush remaining BoraSol-WP<sup>TM</sup> out of equipment. The rinsate should be saved and treated as clean water to make up future BoraSol-WP<sup>TM</sup> solutions or disposed of in accordance with local regulations.

### **General Insect Control**

Argentine, Pharaoh and Fire Ant colonies are affected by 1% BoraSol-WP<sup>TM</sup> solutions in 10% sugar bait solutions. Ants are controlled by destroying the entire colony and queens in their home nest. Treatments will extend to two or three months in most cases. 5-7% BoraSol-WP<sup>TM</sup> sugar solutions will have quick kills of 2-3 days, but are not permanent. Carpenter ants: BoraSol-WP<sup>TM</sup> powder can be applied by drilling and injecting the powder into insect galleries or dusting wood surfaces (12-14 g/sq.ft.). BoraSol-WP<sup>TM</sup> can be dusted into wall voids, attics and soffit areas for insect control.

Cockroaches and silverfish are also controlled by powder applications, solid bait applications or by low concentrations of liquids as baits. Dry mixed baits will kill primarily by ingestion within one week. Baits consist of mixtures of 6 to 50% of BoraSol-WP<sup>TM</sup> and (the balance) commercially available rodent chow.

### **Preventative Treatment of Wood In Existing Structures**

Drywood Termites and other species of termites as well as wood boring insects and carpenter ants can be repelled by new or old treated wood in existing structures. Attic areas prior to insulating can be treated for drywood termites by dusting with a minimum of 2.5 oz of BoraSol-WP<sup>TM</sup> powder/100 sq.ft. (0.7 g/sq.ft). Re-dusting applications are to be repeated every 6 months.

#### **For Termites:**

Spray applications of 15% solution of BoraSol-WP<sup>TM</sup> can be made to wood in existing structures (1 gallon/200 sq.ft.). This treatment is supplemental for prevention of subterranean, Formosan termites and other termites. Applications of BoraSol-WP<sup>TM</sup> should result in retentions of 0.17 lb/ft<sup>3</sup> (2.8 kg/m<sup>3</sup>) B<sub>2</sub>O<sub>3</sub> or 0.26 pcf DOT (4.2 Kg/m<sup>3</sup>) against Non-Formosan termites. Two applications of 15% BoraSol-WP<sup>TM</sup> are required against non-Formosan Termites. Formosan termites require 0.28 lbs/ft<sup>3</sup> B<sub>2</sub>O<sub>3</sub> (4.5 Kg/m<sup>3</sup>) or 0.42 pcf DOT (6.7 Kg/m<sup>3</sup> DOT). Three coats of 15% BoraSol-WP<sup>TM</sup> are



required for Formosan Termites. Drywood termites are controlled by dust applications at 0.7g/sq.ft. in attics, soffits and other structural voids.

Apply the 15% BoraSol solution to all accessible surfaces of bare wood at a rate of 1 gallon per 200 square feet of treated areas. This should include the structure flooring, sub floors, sill plates, top plates, wall studs, trusses, rafters, roofing, plywood, etc. Avoid spraying electrical components. Be sure electricity is turned off until solution is completely dry. Protect treated wood from excessive rain. Use of this product for termite protection does not substitute for mechanical alteration, soil or foundation treatment, but is merely a supplement that is used as a preventative treatment to protect treated wood only

### **Supplemental Pre-Treatment for Whole House Protection**

Spray applications of 15% aqueous solutions of BoraSol-WP<sup>TM</sup> may also be made to wood during construction. The mixing instructions are the same as shown above in the Remedial Section. Apply the 15% BoraSol-WP<sup>TM</sup> solution to all accessible surfaces of bare wood at a rate of 1 gallon per 200 square feet of treated areas. This will include all wood surfaces in crawl spaces and basements, sill plates, floor joists, flooring, girders, sub floors, wall studs, etc.. Trusses, rafters, roofing and plywood siding should also be treated for maximum protection.

Treatment of wood adjacent to plumbing and electrical conduit and ducts where they penetrate sub floors or plates should be made. Treat the surface in a two foot radius from the utility holes. BoraSol-WP<sup>TM</sup> is effective for interior and exterior wood that will be protected from excessive rain and not in direct contact with soil. Types of wood include, but are not limited to all types of lumber, logs and plywood. BoraSol-WP<sup>TM</sup> is toxic to wood-destroying insects, but surface etching of treated wood may occur. Allow any treated surfaces to dry thoroughly, 2-3 days before applying a final finish. If any residue is present after drying, it is because the wood was too dry when the BoraSol-WP<sup>TM</sup> was applied (<15% moisture content) and a residue may be seen. Lightly spray the surfaces with clean water to enhance the moisture content of the wood and thus enable the BoraSol-WP<sup>TM</sup> to diffuse into and through the wetted wood. Avoid spraying electrical components. Be sure electricity is turned off until solution is completely dry. Protect treated wood from excessive rain. Preventative treatment for Drywood termites in attic, soffit and other void areas can be done prior to insulating by dusting at 0.7 g/sq/ft/.

Use of this product for termite protection does not substitute for mechanical alteration, soil or foundation treatment, but is merely a supplement that is used as a preventative treatment to protect treated wood only.

### **Protection of Wood from Fungal Attack (mold, mildew)**

BoraSol-WP™ can be mixed with BoraSol-MC™ (Maquat LC 12S – 50%) for the purpose of increased protection of wood from fungal attacks. BoraSol-MC™ is used in Spray, Brush or Dip Diffusion applications in small tanks (<100 gallons).

For lumber treated by spray, brush or dip diffusion in small tank applications: Use 5% by volume of BoraSol-MC™ in a 15% BoraSol-WP™ solution. (e.g. for a 5% BoraSol-MC™ solution, add 6.4 fl oz of BoraSol-MC™ to 1 gal of 15% BoraSol-WP™ (1.5 lb BoraSol-WP™/gallon). Apply treatment solution by spray or brush to the point of runoff. Repeat application until coverage is 200 sq.ft./gallon. For effective inhibition of mold and fungi, the work surface must be completely treated. No voids are permitted for complete control of mold and fungi. Allow treated surfaces to dry after treatment. Maintain treated dried wood surfaces away from rain in a protected environment in order to prevent leaching of active ingredients. Spraying and/or brushing are effective methods of application in either existing structures or new construction. In existing structures, the conditions causing the mold should be remediated before any pesticidal treatments are initiated. Drywall surfaces should be removed along with any insulation that has been through a catastrophe such as a flood, roof leak or plumbing leak. Wood studs or structural behind such damaged areas should be cleaned and then treated with a BoraSol-WP™ and BoraSol-MC™ solution before addition of the insulation or finish drywall.

#### **Preventative Treatments for Mold**

Preventative treatments for mold can be made in new construction and existing construction. Treatments in kitchens, bathrooms, laundry room and crawl space areas where high humidity conditions can be found will inhibit the growth of mold. Hidden areas behind wallboard are susceptible to mold when leaks from roofs, pipes and condensation on pipes are not noticed over long periods of time. Apply the BoraSol-WP™ and BoraSol-MC™ solution to the point of run off for all surface areas for best protection.

#### **REMEDIAL TREATMENTS OF DAMAGED AREAS**

A solution containing 15% BoraSol-WP™ and 5% BoraSol-MC™ can be used for interior locations of a water damaged house.

For water damage less than 24-48 hours old, follow the action instructions from Table 1, "Water Damage – Cleanup and Mold Prevention" available at [www.epa.gov/mold/table1.html](http://www.epa.gov/mold/table1.html). The complete booklet is available at the section titled "Mold Remediation in Schools and Commercial Buildings". Also see Table Two Surface Preparation Guidelines" before starting any remediation actions.

CONSULT WITH A PROFESSIONAL MOLD REMEDIATOR FOR "LARGE" SITUATIONS. THESE INSTRUCTIONS MUST BE FOLLOWED BEFORE ANY REMEDIAL APPLICATIONS OF BORASOL WP OR BORASOL MC ARE PERFORMED.

Other guidelines for Remediation of large areas have been published by the Indoor Air Quality Association at [www.iaqa.org](http://www.iaqa.org); The Institute of Inspection, Cleaning and Restoration, Standard S520; The New York Department of Health, "Guidelines on Assessment and Remediation of Fungi in Indoor Environments". Remediation standards must be followed and all contaminated materials must be removed before using BoraSol MC and/or BoraSol WP.

**PROTECTION OF WOOD FROM INSECT AND FUNGAL ATTACK**

In New Construction, applications of BoraSol-WP™ for insect control are supplementary. Extra protection on new or old construction can be obtained from BoraSol-WP™ where termite swarming occurs in attic or overhang vent areas. BoraSol-WP™ will protect wood if ground termite treatments are breached. See Table A for the schedule of required applications. Similarly, for new or old construction, both insect and mold protection can be applied through an application of one solution with 15% BoraSol-WP™ and 5% BoraSol-MC™. See Table B for the schedule of required applications.

Both BoraSol-WP™ and BoraSol-MC™ are required for combined insect and fungal protection of wood and other wood product surfaces. The Tables below show the treatments necessary to achieve the desired protection.

Protection	Applications of 15% BoraSol-WP™
General Insect	1
Subterranean Termites	2
Formosan Termites	3

Table A

Protection	Applications
General insects and Mold	1 application of 15% BoraSol-WP™ with 3% BoraSol-MC™
Subterranean. Termites and Mold	1 application of 15% BoraSol-WP™ and a final application of 15% BoraSol-WP™ with 5% BoraSol-MC™
Formosan. Termites and Mold	2 applications of 15% BoraSol-WP™ and a final application of 15% BoraSol-WP™ with 5% BoraSol-MC

Table B

Table A shows the required applications of 15% solutions of BoraSol-WP™ for different types of insects. Table B shows the types and numbers of solutions to be applied for both insect and mold protection.

To make a maximum wood protection solution using BoraSol-WP™ and BoraSol-MC™:

1. Add 1.5 pounds of BoraSol-WP™ (disodium octaborate tetrahydrate) to 0.75 gal (3 quarts) of water for each gallon of treating solution that is required.
2. Mix or Stir until a clear solution is obtained.
3. Add 6.4 fl.oz. of BoraSol-MC™ to the BoraSol-WP™ solution from step two. Mix well until the solution is a uniform composition. Add water to bring the final volume up to a gallon. Mix well. Apply by either brush or spray applications.

**STORAGE AND CONTAINER DISPOSAL HANDLING**

BoraSol-WP™ is contained in a non-refillable container. Do not reuse or refill this container. Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Store in a dry place. Do not store where children or animals may gain access.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Offer for recycling if available. Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

**WARRANTY NOTICE**

Neither manufacturer nor seller shall be liable in respect to any injury or damage suffered by reason of the use of this product for a purpose not indicated by the label or when used contrary to the directions or instructions hereon nor with respect to breach of any warranty not expressly specified herein. To the extent permissible by law, the buyer accepts this material subject to these terms, and assumes all risk of usage and handling except when used or handled in accordance with this label. For active termite infestations, get a professional inspection.

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**SUBLABEL B : Industrial Users: Pressure Treaters and Dip-Diffusion Users**

**BoraSol-WP™**

FOR PRESSURE TREATMENT AND DIP-DIFFUSION TREATMENT OF WOOD AND WOOD PRODUCTS .

**ACTIVE INGREDIENT:**

Disodium Octaborate Tetrahydrate (Na<sub>2</sub>B<sub>8</sub>O<sub>13</sub> • 4H<sub>2</sub>O) .....98%

**INERT INGREDIENTS:**.....2%

**TOTAL:** 100%

(Product contains 2% H<sub>2</sub>O-absorbed moisture)

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

EPA REG. No. 69529-2

EPA EST.No. 79740-ARG-001

NET CONTENTS: 50 lbs, 2000 lbs

	FIRST AID
If swallowed	-Call poison control center or doctor immediately for treatment advice. -Have person sip a glass of water if able to swallow. -Do not induce vomiting unless told to do so by the poison control center or doctor. -Do not give anything by mouth to an unconscious person.
If in eyes	-Hold eye open and rinse slowly and gently with water for 15-20 minutes. -Remove contact lenses, if present, after the first 5 minutes, then

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	continue rinsing eye. -Call a poison control center or doctor for treatment advice.
If on skin or clothing	- Rinse skin with plenty of water for 15-20 minutes. -Take off contaminated clothing. -Call poison control center or doctor for additional treatment advice.
If Inhaled	Move person to fresh air. -If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible -Call a poison control center or doctor for further advice.

Have the product or label with you when calling a Poison Control Center or Doctor or going for treatment. In case of emergency, for additional information call (866-267-2837).

*For use by Individuals/Firms licensed or registered by the state to apply termiticide products. States may have more restrictive requirements regarding qualifications of persons using this product.*

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed. Avoid contact with eyes. Wash thoroughly after handling. Avoid contamination of food and feed. Do not leave container where children or animals may gain access

## CAUTION

### PERSONAL PROTECTION EQUIPMENT

Applicators and other handlers must wear a long-sleeved shirt and long pants which cover the entire arm and leg skin surface, socks, water resistant boots, chemical resistant gloves, and chemical resistant protective eyewear – splash goggles are recommended. When applying this product in confined spaces such as crawl spaces and attics, a ventilation exhaust system is required. If this is impractical, the use of a NIOSH approved respirator designed for dusts/mists is required. Clean spills and over-spray with a clean damp cloth or use an absorbent. Dispose of spill as required by state guidelines and laws.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not contaminate water when cleaning equipment or disposing of equipment wash waters and rinsate. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to

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discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark.

#### **PHYSICAL OR CHEMICAL HAZARDS**

BoraSol-WP™ is stable at room temperature in closed containers under normal storage conditions. When heated it loses water and forms Boric oxide and Sodium oxide. Avoid high temperatures (> 250°F), dust generation and exposure to moist air or water. Reaction with strong reducing agents will generate hydrogen gas, which could create an explosion hazard.

**DIRECTIONS FOR USE:** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read and follow all applicable directions and precautions on this label before using.

- Do not contaminate feed, water or food.
- Do not use to treat lumber that will contact soil or be exposed to leaching by weather.
- Do not apply directly to food.
- This product can be tank mixed with other pesticide products.
- Children and pets should not be in treatment area until after application is completed.
- Do not treat pets with this product. Avoid contamination of feed and foodstuff. Avoid contamination of ornamental plants.

#### **GENERAL INFORMATION**

BoraSol-WP™ is a water-soluble inorganic borate salt with termiticidal properties. BoraSol-WP is effective for the protection and remedial treatment of wood against wood-destroying organisms, including the target pests listed below. This product can be used for the pressure treatment of lumber and for the dip-diffusion treatment of lumber.

BoraSol-WP™ will penetrate the wood to the heartwood, protecting the wood from termite and other wood destroying insects. BoraSol-WP™ may be tank-mixed with an approved pesticide or an approved fungicide/moldicide for increased performance in insect protection or fungus/mold protection on hard surfaces. BoraSol-WP™ will protect wood from both white rot and brown rot and other fungi. Tank mixing with other fungicides or pesticides must follow any label instructions and precautions.

**TARGET ORGANISMS**

BoraSol-WP™ is effective for treatment of wood (and wood-foam composite structural components) against wood-boring insects, including the following insects.

**Subterranean Termites**

Reticulitermes, Heterotermes,  
Coptotermes (Formosan)

**Dampwood Termites**

Zootermopsis

**Drywood Termites**

Ants: Red Fire, Pharaoh, Argentine,  
Carpenter Ants (Camponatus)

German Cockroaches

Silverfish

**Powderpost Beetles**

Lyctidae, Anobiids,  
Bostrichidae, Cerambycidae

**Wood Decay Fungi**

Brown Rot (Geophyllum trabea)

White Rot (Trametes versicolor)

other wood rot fungi

**This label is for End-Use Applications Only.****WOOD**

BoraSol-WP™ is recommended for wood materials in accordance with the specific treatment methods described below. BoraSol-WP™ is effective for interior and exterior wood (and wood-foam composite structural components) that will be protected from rain and not in direct contact with soil. Types of wood include, but are not limited to, all types of lumber, logs, plywood and wood products. This product is toxic to wood-destroying insects, but surface etching of treated wood may occur.

**PRESSURE TREATMENT**

Softwood species use a low concentration solution for Pressure Treatment processes. A 1-2% concentration is very common. For 1000 gallons of 2% concentration, 174 lbs of BoraSol-WP™ would be dissolved. Wood Pressure Treaters can adjust the solution strength to fit the variables of the operating cycle. Vacuum (inches of Mercury), time of vacuum, pressure (psi), time of pressure to achieve the proper loading of the DOT in any specie of wood based on experience.

Pressure treatment of wood must result in retention of 0.17 pcf (2.8 kg/m<sup>3</sup>) B<sub>2</sub>O<sub>3</sub> or 0.26 pcf (4.2 kg/m<sup>3</sup>) DOT for Non-Formosan Termites in the assay zone specified in AWPA standard T1-10. For Formosan termites, the retentions must be 0.28 pcf (4.5Kg/m<sup>3</sup>) B<sub>2</sub>O<sub>3</sub> or 0.42 pcf (6.7Kg/m<sup>3</sup>) for DOT per the AWPA standard U1-10. The concentration of the solution must be adjusted to give the correct retention for the wood species and size of lumber being treated; in general, solutions are in the range of 1-2% DOT (0.083-0.166 lb/gal w/v) for softwood species.



Clean wood must be cut to dimension, dried to less than 25% moisture (as oven dry weight), and stickered before treating. If several species are being treated at once, the treatment schedule for the most difficult-to-treat species must be chosen. If both sapwood and heartwood are included, use the schedule for heartwood to ensure adequate loadings. Pressure Treated wood with its high concentration of active ingredient throughout the wood volume and surface will be effective against all the Target organisms.

### **Cross tie Applications**

BoraSol-WP™ can be used on hardwood lumber (e.g. Railroad crossties and switchties under AWWPA Book of Standards, 2010, (Use Category U1-10, Section 3, Commodity Specifications for Treated Wood End Uses). The Borate treated wood must also be post treated with an oil borne preservative for encapsulation purposes. The finished wood product can be rated as a 4C Category Use per the AWWPA Book of Standards.

Hardwood species will require 20% solutions and the use of elevated temperatures (150-180°F. AWWPA Book of Standards, Section T1-10, Sec. A lists the regulated operating conditions for a Pressure Treatment cycle. One gallon of 20% BoraSol-WP™ solution is made by diluting 1.86 lbs of BoraSol-WP™ with 7.45 lbs of hot water with good agitation and heat. Maintain heat and mixing to avoid crystallization of the BoraSol-WP™.

Hardwood Railroad ties can be Pressure Treated with a 20% BoraSol-WP™ (DOT) solution to the point of refusal (approximately 0.6 gal/tie) to give a loading of 0.27 lbs/cu.ft. of DOT (1 lb of DOT/ 7"x9"x8.5' tie).

### **End cut treatment**

Certain pressure treated lumber (Western softwoods) should be treated when cut at a construction site because typical wood preservatives do not penetrate some wood species effectively. Spray, brush or dip the end-cuts over a plastic drop cloth to collect any runoff. Spray or brush generously until the wood will accept no more solution. Alternatively, dip each end-cut for about 5 minutes.

## **DIP-DIFFUSION TREATMENT**

**PREPARATION OF SOLUTIONS:** To prepare solutions, described below, water should be added to the tank to about 80% of the volume of solution required. The temperature is then raised to the desired level and the calculated amount of BoraSol-WP™ is gradually added with good agitation. The remaining water is then added and the solution agitated for an additional 10 minutes to insure that all of the product has dissolved. The temperature of the solution must be maintained during treatment. Upon cooling some borate may crystallize out of the solution, but will re-dissolve when the solution is heated for the next treatment session. In very cold weather, some heating or insulation should be provided to prevent crystallization in the bottom of the tank. The

tank should be covered when not in use to prevent contamination and evaporation of water.

**Conditions and Solution Strengths for the Dip-Diffusion Method**

<b>Lumber Thickness</b>	<b>Pounds of BoraSol-WP™ Per Gallon of Water</b>	<b>DOT (equiv.) Solution Conc.</b>	<b>Minimum Solution Temp.</b>	<b>Time of Diffusion</b>
Up to 1 inch (2.5 cm)	1.6	16.5%	105°F (40°C)	2 to 4 weeks
1 to 1.75 in. (2.5 to 4.0 cm)	1.9	20.5%	120°F (50°C)	4 to 6 weeks
1.75 to 2.5 in. (4.0 to 6.5 cm)	2.4	25	130°F (55°C)	4 to 6 weeks
2.5 to 3.0 in.* (6.5 to 7.5 cm)	2.8	29%	140°F (60°C)	6 to 8 weeks

\* Lumber over 3 inches (7.5 cm) in thickness or over 5 inches (12.5 cm) in width should be dipped twice 24 to 72 hours apart.

\* Different species of wood will require different solution concentrations and the more difficult species may require a second dipping cycle. Lumber treated in this process, needs to conform to AWWA standards U1-10 and T1-10.

**DIP-DIFFUSION METHOD OF APPLICATION**

Dip freshly cut lumber (Moisture content 30-80% water) in a tank containing a hot aqueous solution of BoraSol-WP™ for 2 to 15 minutes. After dipping, the newly treated wood should be stacked and stored under a tarpaulin or shed roof to slow the drying process and prevent wash off by rainfall, thus improving penetration. Diffusion of the wood preservative into the interior of the wood will start immediately and will require several weeks to thoroughly penetrate the lumber, depending on species and thickness of wood. Dip-diffusion of lumber must result in a retention of 0.28 lb/ft<sup>3</sup> (4.5kg/m<sup>3</sup>) B<sub>2</sub>O<sub>3</sub> for Formosan termite protection. The final loading of active ingredient must conform with AWWA specifications U1-10 and T1-10.

Dip diffusion immersion times and solution concentrations will vary according to the specie of wood treated. Longer dip time, higher concentrations and higher temperatures increase the loading of the BoraSol WP. Finished goods should conform with AWWA Standards listed in the above remedial section.

**BoraSol Plus**

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BoraSol-Plus™ is a moldicide that is very effective against many species of mold and sapstain. For increased wood protection, BoraSol-Plus™ is added to pressure treatment solutions or dip diffusion solutions.

For pressure or dip diffusion treatment of wood, add 0.6 gal (5 lbs) of the BoraSol-Plus™ to 1000 gal of BoraSol-WP™ treatment solution. BoraSol-WP™ solutions will vary in concentration (1.5% – 20%) according to the specie of wood being treated in pressure treatment. Dip solutions can vary from 16% to 29% BoraSol-WP™ (see above table). Wood treated for fungal protection with BoraSol-WP™ and BoraSol-Plus™ can be used in new construction or on wood in existing structures.

**STORAGE AND CONTAINER DISPOSAL HANDLING**

BoraSol-WP™ is contained in a nonrefillable container. Do not reuse or refill this container. Do not contaminate water, food, or feed by storage or disposal. STORAGE: Store in a dry place. Do not store where children or animals may gain access. PESTICIDAL DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. CONTAINER HANDLING: Offer for recycling if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

**WARRANTY NOTICE**

Neither manufacturer nor seller shall be liable in respect to any injury or damage suffered by reason of the use of this product for a purpose not indicated by the label or when used contrary to the directions or instructions hereon nor with respect to breach of any warranty not expressly specified herein. To the extent permissible by law, the buyer accepts this material subject to these terms, and assumes all risk of usage and handling except when used or handled in accordance with this label.

2/23/2012