

64405-1

1-11-2002

1/12

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060.

United States Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460-0001	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
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Application for Pesticide – Section I

1. Company/Product Number EPA Reg. No. 64405-1	2. EPA Product Manager Ann Sibold	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/ Product (Name) Bora-Care	PM # 10	
5. Name and Address of Applicant (Include ZIP Code) Nisus Corporation c/o RegWest Company 30856 Rocky Road Greeley, CO 80631-9375	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i) my product is similar or identical in composition and labeling to: NOTIFICATION EPA Reg. No. <u>JAN 11 2002</u> Product Name _____	
<input type="checkbox"/> Check if this is a new address		

Section – II

<input type="checkbox"/> Amendment – Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated 07/08/96
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification – Explain below.	<input type="checkbox"/> Other – Explain below.

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

**Submit label revision notification per PR Notice 98-10.
(Please refer to attached "Notification Discussion")**

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR § 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to the EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR § 152.46 this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section – III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	
				<input type="checkbox"/> Plastic	
				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify): _____	
*Certification must be submitted		If "Yes" Unit Packaging Wgt.	No. Per Container	If "Yes" Packaging Wgt.	No. Per Container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling Accompanying Product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Stenciled <input type="checkbox"/> Paper glued <input type="checkbox"/> Other					

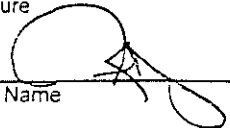
Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application).		
Name Kim Davis, CC, APC	Title Consultant/Agent	Telephone No. (Include Area Code) (970) 353-9611

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received
(Stamped)

2. Signature 	3. Title Consultant/Agent
4. Typed Name Kim Davis, CC, APC	5. Date November 30, 2001

2/12

NOTIFICATION DISCUSSION

Product Name:
Bora-CareEPA Reg. No.:
64405-1Date of Notification:
November 30, 2001

Refer to Reference Label

Description of Revision	Comments
Page 1 of 11	
Deleted: Open Along Perforation	Instruction no longer needed.
Modified selling copy	By inserting language, pests from label text
Changed: Inert To: Other	Per PR Notice 97-6
Deleted: Denisty: 11.51 pounds per gallon	
Updated address	To reflect new company address
Changed: Powder Post Beetles To: Powderpost Beetles	Corrected misspelling
Page 4 of 11	
Deleted sentence regarding areas where soil treatment/ barriers are required by law.	Language was unclear and causing confusion in the market place.
Page 5 of 11	
Changed: wood To: areas	
Page 7 of 11	
Deleted: Treat all wall base plates and the bottom two (2) feet of all interior and exterior wall studs.	Language was causing confusion in market place, particularly with multi-story structures.
Changed: XII To: XI	
Page 11 of 11	
Updated address	To reflect new company address

NOTIFICATION

JAN 11 2002

64405-1 **NEW LABEL:** Page 1 of 10
11/30/01 NOTIF

3/12

{Front Panel}

BORA-CARE®

Termiticide, Insecticide and Fungicide Concentrate

For Both Interior and Exterior Prevention and Control of: •Subterranean Termites •Formosan Termites
•Drywood Termites •Carpenter Ants •Wood Destroying Beetles •Decay Fungi

Keep Out of Reach of Children

CAUTION

See Back Panel for Additional Precautionary Statements.
See Booklet for Complete Directions for Use.

Active Ingredient:

Disodium Octaborate Tetrahydrate ($\text{Na}_2\text{B}_8\text{O}_{13} \cdot 4\text{H}_2\text{O}$) 40.0%

Other Ingredients 60.0%

Net Contents: 1.0 Gallon (3.78 Liters) **Net Weight:** 11.5 Pounds (5.2 Kilos)

EPA Reg. No. 64405-1 EPA Est. 64405-TN-1

U.S. Patent Nos. 5,104,664, 5,296,240, 5,460,816, 5,645,828

Nisus

Corporation

© 11-01 Made in the U.S.A.

{Back Panel}

BORA-CARE®

Termiticide, Insecticide And Fungicide Concentrate

A Product of Nisus Corporation

For the Prevention and Control of: Termites, Carpenter Ants, Wood Destroying Beetles and Decay Fungi
For Both Interior and Exterior Use

For use in and around Homes, Apartments, Garages, Museums, Public and Private Institutions, Schools, Hotels, Hospitals, Kennels, Stables, Farm Buildings, Trucks, Trailers, Warehouses, Supermarkets, Restaurants and Food Processing Plants.

Authorized by the USDA for use on Non-Food Contact Surfaces in Edible Product Areas of Official Establishments Operating under the Meat, Poultry, Shell Egg Grading and Egg Products Inspection Programs.

Active Ingredient:

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EPA Reg. No. 64405-1 EPA Est. 64405-TN-1

U.S. Patent Nos. 5,104,664, 5,296,240, 5,460,816, 5,645,828

Keep Out of Reach of Children

CAUTION

PRECAUTIONARY STATEMENTS

Hazards To Humans & Domestic Animals

CAUTION: Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Statement of Practical Treatment

If Inhaled: Remove victim to fresh air. Apply artificial respiration if indicated. Contact a physician if warranted. **If in Eyes:** Flush with plenty of water. Get medical attention if irritation persists. **If on Skin:** Wash with plenty of soap and water. Get medical attention.

In Case of a Medical Emergency involving this product call (800) 424-9300 or your local Poison Control Center.

Environmental Hazards

Bora-Care solutions carelessly spilled or applied to cropland or growing plants including trees and shrubs may kill or seriously retard plant growth. Cover plants and nearby soil with plastic to avoid contamination. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

Net Contents: 1.0 Gallon (3.78 Liters) **Net Weight:** 11.5 Pounds (5.2 Kilos)

Nisus Corporation

100 Nisus Drive

Rockford, TN 37853

{Booklet}

For Both Interior and Exterior Use

For use in and around Homes, Apartments, Garages, Museums, Public and Private Institutions, Schools, Hotels, Hospitals, Kennels, Stables, Farm Buildings, Trucks, Trailers, Warehouses, Supermarkets, Restaurants and Food Processing Plants.

Authorized by the USDA for use on Non-Food Contact Surfaces in Edible Product Areas of Official Establishments Operating under the Meat, Poultry, Shell Egg Grading and Egg Products Inspection Programs.

PRECAUTIONARY STATEMENTS

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Environmental Hazards

Bora-Care solutions carelessly spilled or applied to cropland or growing plants including trees and shrubs may kill or seriously retard plant growth. Cover plants and nearby soil with plastic to avoid contamination. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

NOTICE

Read and understand the entire label before using. Use only according to label directions.

Before buying or using this product, read **Warranty Limitations and Disclaimer** statement found elsewhere on this label. If terms are unacceptable, return unopened package to seller for full refund of purchase price. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under **Warranty Limitations and Disclaimer**.

Bora-Care® should be applied only to bare wood, plywood, particle board and other cellulosic materials where an intact water-repellent barrier such as paint, stain or a sealer is not present.

The use of this product in food processing establishments should be confined to time periods when the plant is not in operation. Foods should be removed or covered during treatment. All food processing surfaces should be covered during treatment or thoroughly cleaned before using. After treatment in food processing plants, thoroughly wash all equipment, benches, shelving, etc. where exposed food will be handled, with an effective cleaning compound and rinse with potable water.

When spraying overhead interior areas of homes, apartment buildings, etc., cover or protect all surfaces below the area being sprayed with plastic sheeting or other material which can be disposed of if contamination from dripping occurs. Do not apply in food serving areas while food is exposed.

Bora-Care is not a soil termiticide and should not be used to directly treat the soil.

Storage and Disposal

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

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

Pesticide Disposal: Do not contaminate water when disposing of equipment washwaters. Wastes resulting from the use of this product may be disposed of on site or 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.

Cleanup: Use soap and water to clean up tools.

Safe Handling Procedures

Applicators and other handlers must wear long-sleeved shirt and long pants, socks, shoes, chemical-resistant gloves and protective eyewear. When applying **Bora-Care** in confined spaces, it is recommended that ventilation or an exhaust system be provided. If this is impractical, the use of a NIOSH approved respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter is recommended. Spills and over-spray may be cleaned with a damp cloth or absorbed with appropriate materials. (Refer to the **Bora-Care** Material Safety Data Sheet for additional health and safety information.)

I. Mixing Instructions

Bora-Care is a concentrate which **must** be diluted with clean water before use. The use of warm or hot water, if available, and an impeller-type mixer which can be used with an electric drill aids the dilution process.

- A. Hand Sprayers:** Mix in a clean container and stir the solution until completely uniform. Always mix in a separate container then add the solution to a spray tank. Mixing **Bora-Care** directly in a spray tank can block hoses and nozzles.
- B. Hand Volume Pumping Systems:** Add all of the dilution water to tank, start recirculator, then slowly add **Bora-Care** concentrate. Allow to mix until uniform.

Use 1:1 and 2:1 **Bora-Care** solutions within 24 hours after mixing. 5:1 solutions will remain stable for up to 30 days. Do not leave unused solution under pressure or in tank overnight. Clean and/or flush equipment and lines with water after use.

Bora-Care may be tank-mixed with an approved non-residual pesticide for quicker knockdown of carpenter ants and other insects.

II. Dilution Ratios by Volume

Table A

Target Pests	Dilution Ratios Water to Bora-Care	Application Notes
All Insects and Decay Fungi	1:1	Spray, Injection, Brush, Roller
Subterranean and Formosan Termites	1:1 or 2:1	2:1 dilution ratio may be used for foaming.
Drywood Termites	1:1 or 2:1	
Anobiid and Lyctid Powderpost Beetles	1:1 or 2:1	Use a 2:1 dilution ratio for treating hardwood floors. Logs require a 1:1 ratio.
All other beetle species	1:1	
Carpenter Ants	1:1 or 2:1	
Decay Fungi	1:1 or 2:1	Use a 1:1 dilution ratio on wood members 2" thick or greater.
Drywood Termites, Powderpost Beetles and Decay Fungi	5:1	Two (2) applications required for surface spray. For prevention only.

Table B

Application	Dilution Ratios Water to Bora-Care	Application Notes
Logs, Large Beams and Dimensional Lumber	1:1	All insects and Decay Fungi
Preventative Treatment of Decking, Fences and Plywood	2:1	Use on wood members 2" in thickness or less.
Prevention of Powderpost Beetles and Drywood Termites	5:1	For prevention only.
Logs, Large Beams and Dimensional Lumber	5:1	Dip treatment only.

Table C

Parts Water	Parts Bora-Care	% Disodium Octaborate Tetrahydrate
1	to 1	23%
2	to 1	16%
3	to 1	13%
5	to 1	9%

III. General Information

Bora-Care is an innovative termiticide, insecticide and fungicide that eliminates existing infestations and provides long term protection against:

Subterranean Termites: *Reticulitermes*, *Heterotermes*

Formosan Termites: *Coptotermes*

Dampwood Termites: *Zootermopsis*, *Neotermes*

Drywood Termites: *Kaloterms*, *Incisitermes*

Powderpost Beetles: *Lyctidae*, *Bostrichidae*

Anobiid Beetles: *Anobiidae*

Old House Borers, Longhorn Beetles: *Cerambycidae*, *Hylotrupes*

Ambrosia Beetles: *Platypodidae*, *Scolytidae*

Carpenter Ants: *Camponotus*

Brown Rot, White Rot and Wood Decay Fungi [including:

Antrodia sinuosa	Fomes pini	Phialophora heteromorpha	Poria placenta
Antrodia xantha	Fomes pinicola	Phialophora lignicola	Poria subacida
Aspergillus amstelodami	Gloeophyllum abietinum	Phialophora luteo-olivacea	Poria viallantii
Aspergillus niger	Gloeophyllum sepiarium	Phoma herbarum	Poria vaporaria
Aureobasidium pullulans	Gloeophyllum trabeum	Phoma lanosa	Poria xantha
Basidiomycete	Hericium abietis	Polyporus abietinus	Rhinocladia spp.
Bisporia pusillas 132	Heterobesidion annosum	Polyporus rugulosus	Scerophoma pityophila
Ceratocystis pluriannulata	Lentinus lepideus	Polyporus sulphureus	Serpula lacrymans
Ceratocystis picea	Lenzites trabea	Polyporus tomentosus	Sistotrema brinkmanii
Chaetomium globosum	Merulius lacrymans	Polyporus versicolor	Stachbotrys atra corda
keinze			
Coniophora cerebella	Ophiostoma coeruleum	Polystictus versicolor	Stereum abietinum
Coniophora olivacea	Paecilomyces varioti	Poria carbonica	Torulla spp.
Coniophora puteana	Phialophora spp.	Poria incrassata	Trametes lilacino-gliva
Fomes lividus	Phialophora fastigiata	Poria monticola 698	Trametes serialis
Fomes officinalis	Phialophora haffmannii	Poria nigrescens 4856	Trichocladium asperum]

Bora-Care can be used on all cellulosic materials including wood, plywood, particle board, paper, oriented strand board (OSB), cardboard and wood composite structural components.

As a remedial treatment, **Bora-Care** will both eliminate and prevent infestations of Formosan, subterranean and drywood termites, wood boring beetles, carpenter ants and decay fungi. It may also be used as a supplement or alternative to fumigation in order to provide long-term residual control.

Since **Bora-Care** is applied directly to the wood, it can be used in areas where environmental contamination is of concern (nearby wells, cisterns, etc.). The active ingredient in **Bora-Care** is an inorganic salt and once in place it will not decompose or volatilize out of the wood. Treatment is long lasting [up to 40 years] as long as the treated material is not exposed to rain, continuous water or ground contact.

[The active ingredient in **Bora-Care**, disodium octaborate tetrahydrate, is toxic to many insects, decay fungi and some forms of bacteria. Although the efficacy of borates (salts containing the element boron) against insects such as termites and wood boring beetles is well documented, the actual mechanism is not completely understood. The most accepted hypothesis is that boron kills the intestinal flora that allow some insects to digest food. Without them, these insects essentially starve to death. **Bora-Care's** patented formulation greatly enhances both depth and speed of penetration in wood as well as the efficacy of the active ingredient. Once **Bora-Care** has been applied, those insects which eat or infest the wood come in contact with the active borate ingredient and are killed. Some wood damaging insects, such as carpenter ants, do not consume wood but use the wood as nesting sites. While chewing, they exude chemicals which soften the wood for easier removal. In the process of releasing and absorbing these chemicals or by being in contact with

Bora-Care treated wood, these insects also ingest the borate in the wood and are killed. Once individual members of many ant and termite colonies begin to die after feeding on a particular food source, the rest of the colony usually stops feeding on that same source. Thus, borate-treated wood may be avoided by those members of the colony still alive.]

Older wood boring beetle larvae (particularly Old House Borers) already present in the wood at the time of treatment may occasionally emerge sometime after treatment. This will not occur frequently enough to cause structural damage to any wooden member.

IV. Remedial Treatment for the Control of Subterranean, Formosan, Drywood and Dampwood Termites, Carpenter Ants, Old House Borers, Powderpost and Other Wood Boring Beetles and Wood Decay Fungi

- A. **Infested wood** can be treated by spraying and/or injecting **Bora-Care** solution into beetle holes, termite and carpenter ant galleries and decay pockets. Apply one (1) coat of **Bora-Care** solution to the point of wetness to all infested and susceptible wood, paying particular attention to infested areas. Two (2) coats of **Bora-Care** solution need only be applied to those wood members with only one (1) or two (2) exposed sides. For quicker control, apply an additional coat onto heavily infested areas waiting at least 20 minutes between applications.

In cases where the infestation is not accessible from the surface, small holes may be drilled into the wood in order to gain access to the infested area. Inject enough diluted solution to completely flood galleries or voids. Adjacent intact wood may be treated by pressure injecting **Bora-Care** into holes drilled into the wood at eight (8) to ten (10) inch intervals. Inject at 40 psi for four (4) to six (6) seconds per hole.

For treating infested wall voids, refer to Sections IV.E. and F.

- B. **Basements and crawl spaces** may be treated by applying one (1) coat of diluted **Bora-Care** solution to the point of wetness to all infested and susceptible wood surfaces including sill plates, piers, girders, subfloors, floor joists and any wood exposed to vertical access from the soil. On wood where access is limited to one (1) or two (2) sides of wood members, such as sills and plates on foundation walls, apply two (2) coats of **Bora-Care** solution. Wait at least 20 minutes between applications. Apply at a rate of approximately one (1) gallon of **Bora-Care** solution per 200 square feet of floor area (400 square feet of wood surface area).
- C. **Buildings on slabs** may be treated by applying **Bora-Care** solution into wall voids by locating each stud and drilling a small hole through the wall covering to gain access to the infested area. Drill holes adjacent to the side of each stud every 18-24 inches along its length and inject at least 1/3 fluid ounce of **Bora-Care** solution per hole. Drill at least one hole per stud bay near the floor in order to treat the base plate in each void. Treat entire wall areas as opposed to single stud bays in order to include the infested area completely within the treatment zone.
- D. **Wood flooring** can be treated by spray, brush or roller application. It will be necessary to remove any existing finish by complete coarse sanding or stripping prior to application. Apply a two (2) parts water to one (1) part **Bora-Care** (2:1) solution at a rate of approximately one (1) gallon of solution per 500 square feet of floor surface. For treating infestations of subterranean or Formosan termites, two (2) coats may be required, waiting at least one (1) hour between applications. Allow floor to completely dry (typically 48 to 72 hours). Moisture content must be 10% or less before applying final finish. **Bora-Care** applications may raise the grain of the wood and an additional light sanding may be necessary before applying a new finish. Although **Bora-Care** is compatible with most floor coatings, always test a small section of treated floor with the new finish and check for appropriate adhesion prior to coating the entire floor.
- Note:** If surface is tacky or residue is evident after 72 hours of drying time, wash affected area with clean water and a mop, cloth or sponge, rinsing frequently. Allow surface to dry prior to final light sanding and application of finish coat.
- E. **For treating voids, wall studs and wood members not accessible by conventional application methods**, spray or mist solution into voids and channels in damaged and suspected infested wood and/or through small holes drilled into walls and baseboard areas. Holes should be spaced no more than 24" apart along each member to be treated and at least one (1) hole must be drilled between each wall stud when treating base plates. Use sufficient amount of material to cover all areas to the point of wetness.
- Note:** Existing insulation may interfere with distribution of the **Bora-Care** solution. If necessary, move or displace insulation prior to treatment.

- F. Foam applications:** **Bora-Care** can be applied to bare wood surfaces and void areas as a foam by mixing two (2) parts water with one (1) part **Bora-Care** (2:1) and adding 3 to 8 ounces of foaming agent per gallon of mixed solution. Apply foam being sure to completely fill the void. Foam will take approximately one (1) hour to return to liquid state and soak into bare wood.

Apply foamed **Bora-Care** to void spaces at a 1:20 to 1:30 foam ratio (one [1] gallon of mixed solution expanded with foaming agent to produce 20 to 30 gallons of foam). Apply enough foam to completely fill void and contact all wood surfaces in the void space.

- G. [Roofs** containing infested cellulosic materials may be treated by drilling holes through roofing surface in order to gain access to the infested area. Holes should be spaced no more than three (3) feet apart in a grid pattern. Inject two (2) to four (4) fluid ounces of **Bora-Care** solution into each hole. Be sure to patch all holes with suitable materials in order to prevent subsequent water infiltration.

- H. Fogging applications:** For treating confined spaces such as attics or crawl spaces, a fogging device may be used. A two (2) parts to one (1) part **Bora-Care** (2:1) solution should be added to the fogging device reservoir. Fog the area with enough **Bora-Care** solution to completely wet all exposed wood surfaces. Apply approximately one (1) gallon of solution for every 400 to 800 cubic feet of void volume. In heavily infested areas, fogging should be supplemented with direct spray applications. If fogging is for control of subterranean or Formosan termites, two (2) separate applications may be necessary. Wait at least 2 hours between applications. Multiple fogging devices should be operated simultaneously for each 2000 cubic feet of void volume being treated.

Note: Fogging is recommended **only** when access is limited, preventing application by other means.]

- I. Foam Insulation** may be treated by injecting a two (2) parts water to one (1) part **Bora-Care** (2:1) solution into the infested area and/or low pressure surface spraying at a rate of one (1) gallon per 300 to 400 square feet.

Note: Some types of foam insulation, such as polyisocyanurate and extruded polystyrene, have closed cell structures which do not allow significant penetration from surface application. These types of foam should be injected, as well as surface sprayed, to achieve proper control or prevention of infestations.

V. Preventative and/or Pretreatment for Whole House Protection from Subterranean, Formosan, Drywood and Dampwood Termites, Carpenter Ants, Old House Borers, Powderpost and Other Wood Boring Beetles and Wood Decay Fungi

Note: This treatment serves as a primary treatment for the control of Formosan and subterranean termites.

Pretreatment should be performed at a point during the construction process when the greatest access to all wood members is available. Normally this is at the "dried-in" stage of construction when all structural wood and sheathing is in place, yet prior to installation of insulation, mechanical systems, electrical wiring, etc.

Apply one (1) coat of a one (1) gallon water to one (1) gallon **Bora-Care** (1:1) solution to all wood surfaces to the point of wetness. Concentrate application in areas susceptible to attack, to include sills, plates, floor joists, piers, girders and subfloors. Treat wood in all plumbing, electrical and ductwork areas where they penetrate walls or floors. Treat all base plates and studs on interior and exterior walls, especially those surrounding any high moisture areas such as bathrooms, kitchens and laundry rooms. For buildings built on slabs, treat all wood in contact with the slab as well as all interior and exterior wall studs and wall sheathing material. In attics, treat all wood including ceiling joists, trusses, top plates, rafters and roof decking. Be sure that all sill plates and wood contacting garages and porches are treated.

In areas where access is limited to one (1) or two (2) sides of a wood member, apply two (2) coats of **Bora-Care** solution to the exposed surfaces. Wait at least 20 minutes between applications.

Treat all exterior wood including siding, facias, soffits, eaves, roofing, porches, decks and railings (refer to Sections VIII and IX for complete exterior application information).

VI. Preventative and Pretreatments for Subterranean Termites (Crawl Space, Basement and Slab)

Note: This treatment serves as a primary treatment for the control of subterranean termites.

Use only a one (1) part water to one (1) part **Bora-Care** (1:1) solution when treating for subterranean termites.

Pretreatment may be performed at any point during the construction process, however, it is best performed when greatest access to all wood members is available. Normally this is at the "dried-in" stage of construction when all structural wood and sheathing is in place, yet prior to installation of insulation, mechanical systems, electrical wiring, etc.

- A. **Buildings on Crawl Spaces and Basements:** Apply one (1) coat of a one (1) gallon water to one (1) gallon **Bora-Care** (1:1) solution to the point of wetness in a 24-inch wide uninterrupted band to all wood surfaces in crawl spaces and basements, to include all sills, plates, floor joists, piers, girders and subfloors as well as wood exposed to vertical access from the soil. Treat any wood adjacent to plumbing, electrical conduit and ducts where they penetrate subfloors or plates, and all wood next to porches, garages and fireplaces in order to provide a two (2) foot wide barrier of **Bora-Care** treatment against termite penetration. On wood where access is limited to one (1) or two (2) sides of wood members such as sills and plates on foundation walls, apply two (2) coats of **Bora-Care** solution. Wait at least 20 minutes between applications. If accessible, treat the exterior of sill areas around the entire perimeter of the structure with a 24-inch wide band of **Bora-Care** solution beginning with the sill area and extending upwards onto the sheathing material. On multiple story structures, treat only the first story above the masonry foundation level. Coated or painted wood may be treated by pressure injecting **Bora-Care** into holes drilled into the wood at eight (8) to ten (10) inch intervals. Inject at 40 psi for four (4) to six (6) seconds per hole.
- B. **Buildings on Slabs:** Apply one (1) coat of a one (1) gallon water to one (1) gallon **Bora-Care** (1:1) solution to all base plates and the bottom 24 inches of all studs on all exterior and interior walls. In areas where access is limited to one (1) or two (2) sides of a wood member, apply two (2) coats of **Bora-Care** solution to the exposed surfaces. Wait at least 20 minutes between applications. Treat all wood in plumbing walls and apply to any wood in bath traps as well as wood adjacent to plumbing, electrical conduit and duct penetrations in order to provide a minimum 24-inch wide barrier of treatment between the soil and the balance of the structure.

VII. **Preventative Treatment for Drywood Termites and Powderpost Beetles**

Apply two (2) coats of a five (5) gallons water to one (1) gallon **Bora-Care** (5:1) solution to all wood surfaces to the point of wetness using a brush, spray or mist. Wait at least 20 minutes between applications.

VIII. **Treatment of Exterior Wood Surfaces Less Than Two Inches Thick such as Decks, Sheds, Siding and Fences**

Apply only to bare wood or to wood surfaces where an intact water repellent or finish is not present. If necessary, remove paint or finish prior to application. Apply one (1) coat of **Bora-Care** solution to the point of wetness to all wood surfaces. Apply two (2) coats of **Bora-Care** solution to heavily infested areas and to those surfaces where access is limited to one (1) or two (2) sides of wood members. Do not apply in rain or snow. Exterior wood surfaces must not be exposed to rain or snow for at least 48 hours after treatment. If inclement weather is expected, protect exterior treated surfaces with a plastic tarp.

For wood in contact with the ground or soil, see Section XI.

- A. **Finishing and Maintaining Treated Surfaces:** For long-term protection, exterior wood surfaces which have been treated with **Bora-Care** will require a topcoating with a water-resistant finish such as paint or exterior stain. The finish or topcoat should be applied within six (6) weeks of treatment. It is important to allow **Bora-Care**-treated wood to completely dry (at least 48 hours) before applying any protective topcoat. Coat a small section of treated wood with the finish to be used and check for compatibility prior to complete application.

IX. **Treatment of Log Structures, Timbers, Beams, Pilings and Exterior Wood Members Two or More Inches Thick**

Apply only to bare wood or to wood surfaces where an intact water repellent or other finish is not present. If necessary, remove paint or finish prior to application. Interior, unfinished surfaces which have accumulated dirt or cooking oils should be cleaned with a strong detergent prior to treatment. Apply a one (1) part water to one (1) part **Bora-Care** (1:1) solution to the point of wetness to all interior and exterior wood surfaces. Refer to application chart for minimum amount of **Bora-Care** to treat various size logs or beams. Typically, two (2) coats of solution will be required to treat round logs 10" or greater in diameter and rectangular logs larger than 6" x 12". Wait at least one (1) hour between applications. Two (2) coats of **Bora-Care** solution should also be applied to log ends,

notches, corners and sill logs. Actual number of coats necessary to meet the minimum requirements will depend upon actual wood size, surface porosity and number of sides accessible for treatment. Do not apply in rain or snow. Exterior wood surfaces should not be exposed to rain or snow for at least 48 hours after treatment. If inclement weather is expected, protect exterior treated surfaces with a plastic tarp.

A. Finishing and Maintaining Treated Surfaces: For long-term protection, exterior wood surfaces which have been treated with **Bora-Care** will require a topcoating with a water resistant finish, paint or exterior stain. The finish or topcoat should be applied within six (6) weeks of treatment. It is important to allow **Bora-Care**-treated wood to completely dry (at least 48 hours) before applying any protective topcoat. Coat a small section of treated wood with the finish to be used and check for compatibility prior to complete application.

X. Dip Treating Logs and Lumber

A dip treating solution may be prepared by mixing five (5) parts water to one (1) part **Bora-Care** (5:1). This will result in a stable solution containing 9% active ingredient. Bundled wood must be stickered in order to allow the solution to cover all wood surfaces. Logs and/or lumber should be submerged in the solution for at least one (1) minute or until all entrapped air has escaped. Protect treated wood from rain or snow for at least 24 hours after treatment.

XI. Treatment of Wood in Contact with the Ground

A **Bora-Care** treatment to wood in contact with the ground or soil has a limited lifespan and will require periodic reapplication. Protection may be extended with the use of products such as **Jecta® Diffusible Boracide**.

XII. Bora-Care Total Wood Preservative

A wood preservative for protection and treatment of wood against brown rot, white rot, fungal decay and wood destroying insects including beetles, termites and carpenter ants. Treatment is permanent as long as the treated material is not exposed to rain, moisture or ground contact.

A. General Information: **Bora-Care** is a concentrated solution of sodium borate with additives which facilitate rapid penetration of wood, regardless of moisture content. It is designed for preventative and/or remedial treatment of wood in both new and existing structures against fungal decay and wood boring insects including:

Subterranean Termites (*Reticulitermes*, *Coptotermes*)

Dampwood Termites (*Zootermopsis*)

Drywood Termites (*Kaloterms*, *Incisitermes*)

Powderpost Beetles (*Lyctidae*)

Anobiid Beetles (*Anobiidae*)

Old House Borers, Longhorn Beetles (*Cerambycidae*)

Carpenter Ants (*Camponotus*)

B. Surface Preparation: Apply only to bare wood. Remove any previous finishes or water repellents before application of **Bora-Care**. Surfaces should be free of dirt and other contaminants. If finished appearance is a concern, any mold or mildew should be removed prior to application of **Bora-Care** with an appropriate wood cleaner followed by thorough rinsing of surface.

C. Application Instructions:

1. Treatment of Dimensional Lumber, Plywood and Exterior Wood Surfaces (Decks, Sheds, Siding, etc.): Apply only to bare wood or to wood surfaces where an intact water repellent or finish is not present. If necessary, remove paint or finish prior to application. Apply one (1) coat of either a one (1) part water to one (1) part **Bora-Care** (1:1) solution or a two (2) parts water to one (1) part **Bora-Care** (2:1) solution to the point of wetness to all wood surfaces. Apply two (2) coats of **Bora-Care** solution to heavily infested areas and to those surfaces where access is limited to one (1) or two (2) sides of wood members. Do not apply in rain or snow. Exterior wood surfaces must not be exposed to rain or snow for at least 48 hours after treatment. If inclement weather is expected, protect exterior treated surfaces with a plastic tarp.

2. Treatment of Logs, Timbers and Large Beams: Apply only to bare wood or to wood surfaces where an intact water repellent or other finish is not present. If necessary, remove paint or finish prior to application. Interior, unfinished surfaces which have accumulated dirt or cooking oils should be cleaned with a strong detergent prior to treatment. Apply by spray or brush a one (1) part water to one (1) part **Bora-Care** (1:1) solution to the point of runoff to all interior and exterior wood surfaces. Refer to application chart for minimum amount of **Bora-Care** to treat various size logs or beams. Typically, two (2) coats of solution will be required to treat round logs 10" or greater in diameter and rectangular logs larger than 6" x 12". Wait at

least one (1) hour between applications. Two (2) coats of **Bora-Care** solution should also be applied to log ends, notches, corners and sill logs. Actual number of coats necessary to meet the minimum requirements will depend upon actual wood size, surface porosity and number of sides accessible for treatment. Do not apply in rain or snow. If inclement weather is expected, protect exterior treated surfaces with a plastic tarp for at least 48 hours after treatment.

3. **Dip Treating Logs and Lumber:** A dip treating solution may be prepared by mixing five (5) parts water to one (1) part **Bora-Care** (5:1). This will result in a stable solution containing 9% active ingredient. Bundled wood must be stickered in order to allow the solution to cover all wood surfaces. Logs and/or lumber should be submerged in the solution for at least one (1) minute or until all entrapped air has escaped. Protect treated wood from rain or snow for at least 24 hours after treatment.

- D. **Finishing and Maintaining Exterior-Treated Surfaces:** For long term protection, exterior wood surfaces which have been treated with **Bora-Care** will require a topcoating with a water resistant finish such as paint or exterior stain. The finish or topcoat should be applied within six (6) weeks of treatment. It is important to allow **Bora-Care**-treated wood to completely dry (at least 48 hours) before applying any protective topcoat. Coat a small section of treated wood with the finish to be used and check for compatibility prior to complete application. Interior surfaces do not require topcoating except in situations involving repeated moisture contact or high humidity (shower stalls, bath houses, saunas, etc.)

- E. **Retention Rates:** One (1) gallon of **Bora-Care** concentrate {two (2) gallons of **Bora-Care** solution as applied} will treat 800 board feet of wood to a minimum retention level of 0.084 pounds per cubic foot boric acid equivalent (BAE). Since the active ingredient penetrates throughout the wood being treated, the amount of **Bora-Care** needed must be calculated on a volume of wood being treated, not just the surface area. Use the following formulas to calculate the required amount of **Bora-Care**:

For Dimensional Lumber

(2 x 4, 2 x 6, 2 x 12, etc.)

Material thickness (inches) x material width (inches) x material length (feet) divided by 12 = Board Feet

For Log Homes

Log height (inches) x log thickness (inches) x perimeter (feet) x number of courses divided by 12 = Board Feet
(For round logs use the average diameter for both height and thickness measurements)

For Siding and Paneling

One (1) gallon of **Bora-Care** concentrate {two (2) gallons of solution} will treat 800 sq. ft. of 1" thick wood by spraying only one side. If siding or paneling is 1/2" thick, one (1) gallon of **Bora-Care** concentrate {two (2) gallons solution} will treat 1,600 sq. ft.

XIII. Application Rates

Table A – Dimensional Lumber

Lumber Size (Inches)	1 Gallon of Diluted Bora-Care® Will Treat Up To	Minimum Amount of Diluted Bora-Care® To Treat 1000 Lineal Feet
1 x 4	1,200 Lineal Feet	0.8 Gal.
1 x 12	400	2.6
2 x 4	600	1.6
2 x 6	400	2.6
2 x 8	308	3.2
2 x 10	240	4.2
2 x 12	200	5.0
4 x 4	300	3.4
4 x 6	200	5.0
4 x 8	150	6.8
4 x 12	100	10.0
6 x 6	133	7.6
6 x 8	100	10.0
6 x 10	80	12.6
6 x 12	68	15.0

Table B – Panels, Siding and Plywood
(1:1 or 2:1 dilution ratio)

Thickness (Inches)	1 Gallon of Diluted Bora-Care® Will Treat Up To	Minimum Amount of Diluted Bora-Care® To Treat 1000 Square Feet
1/4	1,600 sq. ft.	0.6 Gal.
3/8	1,067	1.0
1/2	800	1.2
3/4	533	1.8
1	400	2.6

Table C – Round Logs
(1:1 dilution ratio only)

Diameter (Inches)	1 Gallon of Diluted Bora-Care® Will Treat Up To	Minimum Amount of Diluted Bora-Care® To Treat 1000 Lineal Feet
6	167 Lineal Feet	6.0 Gal.
8	96	10.4
10	61	16.4
12	43	23.4

Note: The numbers listed above are based on an application rate of one (1) gallon of **Bora-Care** solution to 400 board feet of wood.

XIV. **Warranty Limitations and Disclaimer**

Because of varying conditions affecting use and application, manufacturer warns buyer that these may impair or vary the results or effects of the use of this product. In any event, complete prevention of decay or insect infestation is not guaranteed. Neither the 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. 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.

It is not intended that this product be used to practice any applicable patent, whether mentioned or not, without procurement of a license, if necessary, from the owner, following investigation by the user.

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[] Denotes alternate/optional language

{ } Denotes language that does not appear on the market label