# **BORA-CARE®**

### Termiticide, Insecticide and Fungicide Concentrate

#### A PRODUCT OF NISUS CORPORATION

2014

## 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:

Density: 11.51 pounds per gallon

EPA Reg. No. 64405-1 EPA Est. 64405-TN-1 U.S. Patent Nos. 5.104,664 5.460,816 5.645,828 6.426,095 6.630,174

## 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.

#### 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 directly to 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.)

MADE IN THE U.S.A.



100 Nisus Drive, Rockford, TN 37853 (800) 264-0870 www.nisuscorp.com

#### . 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.** High 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 guicker knock-down of carpenter ants and other insects.

#### II. DILUTION RATIOS by volume.

TABLE A.	ilution Ratios	
Target Pests	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	MATERIAL SECTION AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION
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	3.30
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.

#### 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: Kalotermes, 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

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 as long as the treated material is not exposed to rain, continuous water or ground contact.

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 intested 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 <u>light</u> 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 <u>light</u> 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, remove 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.** 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 all 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 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® 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®.

### XIII. 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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### XII. APPLICATION RATES

Lumber Size (inches)	1 Gallon of Diluted BORA-CARE® Will Treat Up To:	Minimum Amount of Diluted BORA-CARE®t Treat 1000 Lineal Fee
1 x 4	1,200 Lineal I	Fee 0.8 Gallons
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 Square	Feet 0.6 Gallons	
3/8	1,067	1.0	
1/2	800	1.2	
3/4	533	1.8	
1	400	2.6	

TABLE C. R	ound Logs :1 dilution ratio only)	enell on epothical .
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 F	eet 6.0 Gallons
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.



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