

APR 17 2008

Mr. Joseph W. Burley  
SOSTRAM Corporation  
300 Colonial Center Parkway  
Suite 230  
Roswell, Georgia 30076

Subject: Alternate Formulation  
EPA Registration Number: 72304-10  
Product Name: BOR-RAM  
Application Dated: February 5, 2008  
Decision No: 389679

Dear Mr. Burley:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

Sincerely,



Richard Gebken  
Product Manager 10  
Insecticide Branch  
Registration Division (7505P)

Enclosure: Stamped Copy of Label



**ACCEPTED**  
APR 17 2008  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 72304-10

**Termiticide, Insecticide and Fungicide Concentrate**

For the prevention and control of: Termites, Carpenter Ants, Fungi, (including Rot) and Algae

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

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

<b>FIRST AID</b>	
<b>If Swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor for immediate treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a Poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOT LINE NUMBER</b>	
<b>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.</b>	

SEE OTHER PANELS FOR PRECAUTIONARY STATEMENTS

Active Ingredient:

Disodium Octaborate Tetrahydrate*	40.0%
Other Ingredients.....	60.0%
Total.....	100.0%

\*CAS No 12280-03-4

This product contains 4.36 pounds disodium octaborate tetrahydrate per gallon.

EPA Reg. No. 72304-10

EPA Est. No. 75801-CA-001

Read and understand the label before using BOR-RAM. Before buying or using BOR-RAM, read the Warranty and Disclaimer statements found on the last page of the label.

MADE IN THE U.S.A.

Manufactured for:  
 Sostram Corporation  
 300 Colonial Center Pkwy. Suite 230  
 Roswell, GA 30076  
 Phone: (770) 587 9807

**Net Contents: 1 Gallon (3.78 Liters)**

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION:

Harmful if inhaled or absorbed through skin. Avoid breathing vapors or spray mist. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash clothing before reuse. Avoid contamination of food or feed.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, socks, shoes, protective eyewear and chemical-resistant gloves. A ventilator or an exhaust system should be used when applying BOR-RAM in confined spaces. If a ventilation or exhaust system is unavailable, the applicators should use a NIOSH-approved respirator with an organic-vapor removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with an N, R, P or HE pre-filter. Clean over-spray and spills with a damp cloth or absorb with other appropriate materials.

#### USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet;
- Remove clothing immediately if pesticide gets inside, then wash thoroughly and put on clean clothing;
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish and wildlife. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

## DIRECTIONS FOR USE

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

### Use Restrictions

Do not use in edible product areas of food processing plants or on countertops 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 enter or allow others to enter or occupy treated areas until spray has been absorbed into the wood or dried. Treated areas must not be occupied during application. Do not contaminate wells or cisterns.

### Phytotoxicity

This product may be phytotoxic to plants. When treating around the exterior of structures cover and protect shrubbery and plants that may be potentially exposed to this product during application.

### Mixing Instructions

BOR-RAM is a concentrated solution that must be diluted with water before use. Warm or hot water is preferred. If available, an impeller-type mixer combined with an electric drill will maximize the dilution process.

For use with a Hand Volume Pumping System, first add water to tank. Start circulator and slowly add BOR-RAM. Continue circulator until solution is completely mixed and consistent.

For use with a Hand Sprayer, first mix BOR-RAM with water in a clean container until completely mixed. To avoid blocked hoses and nozzles, never mix BOR-RAM directly into spray tank. Always use a clean separate container for mixing.

BOR-RAM solutions mixed at ratios of 1:1, 2:1 or 3:1 should be used within 24 hours of mixing. Do not allow solution to remain in mixing tank or under pressure overnight. All mixing equipment should be cleaned or flushed with water after use.

BOR-RAM can be mixed with pyrethrins at 0.3% for carpenter ants and other listed insects or mixed with Mold-Ram® Fungicide (EPA Reg. No. 72304-1), a 40% active water based chlorothalonil concentrate for mold prevention. The products must be used in accordance with the more restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Follow the mixing directions under the mold prevention section of this label.

**Dilution Ratio Tables:**

Target Insect/Pest	Mixing Ratios Water to BOR-RAM	Application
Subterranean Termites (including Formosan termites)	1:1 or 2:1	Apply the 1:1 ratio by spray, injection, brush or roller. Apply 2:1 ratio for foaming applications or for misting use in inaccessible wall voids.
Drywood Termites or Carpenter Ants	1:1, 2:1 or 5:1	Apply 1:1 ratio for all remedial treatments. Apply 2:1 by foam or if using a misting machine. Apply 5:1 ratio for preventative treatment.
Anobiid and Lyctid Powderpost Beetles	1:1, 2:1 or 5:1	Apply 1:1 ratio for all remedial treatments and preventative treatment for wood larger than 4" in thickness. Apply 2:1 ratio for treating hardwood floors. Apply 5:1 ratio for preventative treatment.
Old House Borers	1:1 or 5:1	Apply 1:1 ratio for all remedial treatments and preventative treatment for wood larger than 4". Apply 5:1 ratio for preventative treatment for wood less than 4" in thickness.
Fungi (Rot) and Algae	1:1, 3:1 or 5:1	Apply 1:1 ratio for remedial treatments for wood larger than 4". Apply 3:1 ratio for remedial treatment for wood less than 4" in thickness. Apply 5:1 for preventative treatment.

**Additional Ratio Instructions**

For logs, large beams, timber and wood less than 4" in thickness, refer to table above and apply 5:1 ratio only for dip treatment for insect prevention. BOR-RAM may be used in addition to other fungicides.

For logs, large beams, timber and wood greater than 4" in thickness, refer to table above and spray application for insects and Fungi (Rot).

For decking, fences and plywood, refer to table above and use on wood less than or equal to 2" in thickness.

For cellulosic drywall and insulation, apply in 1:1, 3:1 or 5:1 ratios. Apply 3:1 ratio for remedial treatment of dry rot. Apply 5:1 ratio for preventative treatment of dry rot. BOR-RAM may be used in addition to other fungicides.

To produce the listed concentrations of Disodium Octaborate Tetrahydrate, use the following volume ratios of water to BOR-RAM:

<u>D.O.T. %</u>	<u>Ratio (water to BOR-RAM)</u>
23%	1:1
16%	2:1
13%	3:1
9%	5:1

**General Information**

BOR-RAM is not intended for application to soil. It is not a soil treatment. In areas where a soil applied termiticide treatment is required by law, BOR-RAM may be applied as supplemental pretreatment to protect wood from subterranean termites that may penetrate chemical gaps occurring in termiticide-treated soil. When active infestations exist, get a professional inspection.

BOR-RAM will provide lasting protection against the following insects:

- Ambrosia Beetles (Playpodidae, Scolytidae)
- Anobiid Beetles (Anobiidae)
- Brown Rot (including Dry Rot) White Rot, Wood Decay and listed\* Fungi
- Carpenter Ants (Camponotus)
- Dampwood Termites (Zootermopsis, Neotermes)
- Drywood Termites (Kaloterme, Incisitermes)
- Old House Borers & Longhorn Beetles (Cerambycidae, Hylotrupes)
- Powderpost Beetles (Lyctidae, Bostrichidae)
- Subterranean Termites (Coptotermes [Formosan] Reticulitermes, Heterotermes)

\* *Antrodia sinuosa* *Antrodia xantha*, *Aureobasidium pullulans*, *Basidiomycete*, *Bisporia pusillas*, *Ceratocystis picea*, *Ceratocystis pluriannulata*, *Chaetomium globosum* *keinze*, *Coniophora cerebella*, *Coniophora olivacea*, *Coniophora puteana*, *Formes lividus*, *Fomes officinalis*, *Fomes pini*, *Formes pinicola*, *Gleophyllum abietinum*, *Gleophyllum separium*, *Gleophyllum trabeum*, *Hericium abietis*, *Heterobesidian annosum*, *Lentinus lepideus*, *Lenzites trabea*, *Merulius lacrymans*, *Ophiostoma coeruleum*, *Paecilomyces varioti*, *Phialophora spp.*, *Phialophora fastigiata*, *Phialophora haffmannii*, *Phialophora heteromorpha*, *Phialophora lignicola*, *Phialophora luto-olivacia*, *Phoma herbarum*, *Phoma lanosa*, *Polyporus abietinus*, *Polyporus rugulosus*, *Polyporus sulphureus*, *Polyporus tomentosus*, *Polyporus versicolor*, *Polystictus versicolor*, *Poria carbonica*, *Poria incrassate*, *Poria monticola*, *Poria nigrescens*, *Poria placenta*, *Poria subacida*, *Poria viallenti*, *Poria vaporaria*, *Poria xantha*, *Rhinocladiella spp.*, *Scerophoma pityophila*, *Serpula lacrymans*, *Sistotrema brinkmeni*, *Stereum abietinum*, *Torulla spp.*, *Trametes lilacino-gliva*, *Trametes serialis*, *Trichocladium asperum*

BOR-RAM is effective when applied as a preventative subterranean termite treatment to concrete, block, brick, metals, PVC plumbing pipes and other non-cellulosic materials found in structures. BOR-RAM is also effective when used on all cellulosic materials including wood, plywood, particleboard, paper, cardboard and wood composite structural components. Do not apply on materials that contain an intact water-repellant barrier (i.e., paint, stain or sealer).

Use caution when spraying overhead interior areas of homes or apartments, etc. Never apply in food serving areas when food is exposed. Cover and protect all exposed surfaces with plastic sheeting or other material that can be disposed of upon contamination or after spraying. Use soap and water to clean tools after application.

An appropriate pigment or marker dye may be added to BOR-RAM to indicate where the solution has been applied. Always refer to the dye product label for specific instructions.

When applying BOR-RAM to prevent subterranean termites in new construction, structural wood is defined as only wood needed for the basic building structure as found in the dried-in-stage of construction, including wood in direct contact with foundations, interior and exterior wall sill plates, wood studs, wood or cellulosic sheathing, floor joists and sub-flooring.

When used as a remedial treatment, BOR-RAM will eliminate and prevent infestation of Formosan, native subterranean termites, wood boring beetles, carpenter ants and decay fungi. To use for long-term residual control, BOR-RAM can be used as a supplement or substitute to fumigation.

On occasion, older wood boring beetle larvae and pupae that are already present in the wood may emerge after treatment. These occurrences are rare. Due to the infrequency, this should not cause any structural damage to any wood member or allow a reinfestation to occur after treatment.

The application of BOR-RAM to wood surfaces in new construction or inside wall voids in existing structures helps prevent cockroaches that may come in contact with treated surfaces. One gallon of BOR-RAM will cover 400 square feet of treated surface area.

**Remedial Treatments**

*Wood*

Spray or inject BOR-RAM solution into beetle holes, termite and carpenter ant galleries and decay pockets. Apply one coat of BOR-RAM solution to infested areas of wood until the surface is completely saturated. For wood members with only one or two exposed sides, apply two coats of BOR-RAM solution. For heavily infested areas, wait 20 minutes between applications.

If the infestation area is not accessible from the surface, drill small holes into the wood and apply enough solution to completely fill galleries or voids. Pressure inject adjacent



intact wood by drilling holes at 8-10 inch intervals; inject at 40 psi for 3-6 seconds per hole.

*Basements and Crawl Spaces*

Apply one coat of diluted BOR-RAM solution to infested areas of wood (i.e., sill plates, piers, girders, subfloors, floor joists and any wood exposed to vertical access from the soil) until the surface is completely saturated. Apply two coats of BOR-RAM solution to wood members with only one or two exposed sides: wait 20-30 minutes between applications. One gallon of BOR-RAM solution can cover 200 square feet of floor area or 400 square feet of wood surface area.

*Buildings on Slabs*

BOR-RAM should be applied into wall voids by locating the studs and drilling a small hole through the wall covering to gain access to the infested area: use a misting or foaming machine – see foam application below. Holes should be drilled 18-24 inches apart and to the side of each stud. Inject 1/3 fluid ounce of BOR-RAM solution into each hole. Drill a minimum of one hole per stud bay near the floor to treat the base plate in each void. To ensure the entire infested area is treated, apply solution to the entire wall areas and not only to single stud bays. Treat the slab surface to a distance of at least 6 inches out from the site of penetration.

*Wood Flooring*

Apply BOR-RAM to wood flooring by spray, brush or roller application. Remove any existing finish by complete sanding or stripping before application. One gallon of BOR-RAM solution will cover 500 square feet of floor surface when mixed at a 2:1 (2 part water, 1 part BOR-RAM) ratio. Two coats may be required when treating infestations of subterranean (including Formosan) termites; wait 60 minutes between applications. Floor must dry completely before applying final finish (typically 48-72 hours). The moisture content must be 10 percent or less.

The application of BOR-RAM may cause the grain of the wood to raise and light sanding may be necessary prior to applying a new finish. While BOR-RAM is adaptable by most wood flooring, test an inconspicuous area with the treatment and verify finish prior to coating the entire floor. If a residue remains on the flooring after 72 hours of drying time, clean and rinse the affected area with a mop or sponge. Floor must dry completely before applying light sanding and/or final finish.

*Non-Accessible Areas*

Use a spray or misting machine to treat voids, wall studs and wood members not accessible by conventional application methods. Apply spray or mist into voids and channels of infested wood or through small holes drilled into the walls and baseboard areas. There should be at least one drilled hole between each wall stud and the holes should not be spaced more than 24" apart within the treated area. Apply enough spray or mist to completely saturate the surface. Insulation may conflict with the application and may be moved prior to treatment.

*Foam Application*

Apply BOR-RAM as foam into void spaces or to bare wood. Apply by mixing 2:1 (2 parts water to 1 part BOR-RAM) ratio and add 3 to 8 ounces of Foam Fill (foaming agent) per gallon of mixed solution. Foam will become liquid and soak into wood within 1 hour. BOR-RAM should be applied to void spaces at a 1:20 to 1:30 foam ratio (one gallon of mixed solution expanded with foaming agent to produce 20-30 gallons of foam). Apply a generous amount of foam to fill void and contact wood surfaces within void.

*Foam Insulation*

Apply a 1:1 (one part water to one part BOR-RAM) ratio of BOR-RAM to foam insulation by injecting the solution into the infested area. If a low-pressure surface sprayer is used, one gallon of solution will cover 300-400 square feet of infested area. The combination of injection and spraying is recommended for insulation types such as polyisocyanurate and extruded polystyrene due to their closed cell structures that reduce penetration from surface application.

*Crawl Space, Basement and Slab*

As a supplemental treatment to concrete, block or brick on basement foundations and the interior of crawl spaces, apply BOR-RAM to prevent shelter tubing by subterranean termites. For this application, apply a 1:1 ratio of BOR-RAM. In crawl spaces and unfinished basements, apply BOR-RAM to 24 inches up from the ground on the interior wall surfaces. In unfinished basements, apply BOR-RAM up to 6 inches away from the foundation walls onto the horizontal surface of the bare slab in addition to the wall treatment. When treating plumbing penetrations or other termite access areas, apply a 1:1 ratio in at least a 12 inch band covering all sides of the slab surface area out from the penetration, and apply up to 24 inches on protruding utilities and adjacent wood.

**Preventative Treatments and Pretreatments**

*Whole House Protection*

BOR-RAM is effective as a primary preventative treatment for subterranean, (including Formosan), drywood and dampwood termites, carpenter ants, old house borers, powderpost and other wood boring beetles and fungi (rot). For optimal results, apply BOR-RAM during the stage of construction when the most access to all structural wood members is available. This stage of construction normally occurs when all structural wood and sheathing is set, but prior to installation of electrical wiring, insulation and mechanical systems.

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For treatment against subterranean (including Formosan) termites, apply to the point of surface saturation one coat of a 1:1 (1 gallon water to 1 gallon BOR-RAM) ratio to all above ground framed wood surfaces as described in the next section.

The following areas should be treated with the 1:1 ratio of water to BOR-RAM:

- Sills, plates, floor joists, piers, girders and subfloors.
- Structural wood in plumbing, electrical and ductwork areas.
- Structural wood base plates and studs on interior and exterior walls.
- Structural wood in contact with slab, interior and exterior wall studs and wall sheathing material in buildings built on slabs.
- Structural wood sill plates and structural wood contacting garages and porches.
- Structural wood and sheathing in bathrooms, kitchens and laundry rooms

Apply a 5:1 (5 parts water to one part BOR-RAM) ratio to the remaining areas:

- All structural wood above the 24 inch continuous band treated with the 1:1 ratio of water to BOR-RAM
- Ceiling joists, trusses, top plates, rafters and roof decking in attics.
- Exterior wood including siding, facias, soffits, eaves, roofing, porches, decks and railings.

For wood members with only one or two exposed sides, including exterior wall base plates and adjoined studs, apply two coats of BOR-RAM solution; wait at least 20-30 minutes between applications.

Treat expansion joints (and the adjoining concrete slab and wall areas distances of 6 inches out and 24 inches up respectively from the joint) between the concrete garage slab and the adjoining house walls with a 1:1 (one part water to one part BOR-RAM) ratio.

#### *Subterranean Termites in Crawl Spaces, Basements and Slabs*

As a primary treatment for subterranean termites in crawl spaces, basements and slabs, apply a 1:1 (one part water to one part BOR-RAM) ratio. Apply BOR-RAM at the stage of new construction when all structural wood and sheathing is in place, but prior to insulation. For optimal results, apply BOR-RAM after final framing inspection and when the most access to all structural wood members is available. If treatment is applied before framing inspection, a second treatment may be necessary to ensure effectiveness.

For application in new construction, do not use BOR-RAM as a primary treatment if the total linear footage of the cellulosic base plates is less than 60% of the total linear footage of all base plates in structure including exterior and interior walls. If the total linear footage of the cellulosic base plates is greater than 60%, but without continuous wood on every exterior wall, apply BOR-RAM to all exterior structural materials, including block or brick, to a height of 24 inches and extend out onto the slab from 2 to 8 inches.

*Buildings on Crawl Spaces and Basements*

Apply BOR-RAM at a 1:1 (one gallon water to one gallon BOR-RAM) ratio in a 24 inch wide continuous band until all structural wood surfaces in crawl spaces and basements are saturated. Application should include all sills, plates, floor joist, piers, girders, subfloors and all structural wood exposed to direct vertical access from the soil. To treat for termite shelter tubes on crawl space walls, apply a 1:1 (1 part water to 1 part BOR-RAM) ratio to concrete or block walls in a 24 inch band up from the ground on interior wall surfaces. One gallon of solution will cover 400 square feet of surface area. If treating areas adjacent to plumbing and electrical conduit and ducts penetrating subfloors and areas that provide a direct vertical access from the soil, treat a 24 inch band in this area. Apply BOR-RAM to all structural wood in finished-out basements where structural wood framing is adjacent to the exterior foundation walls. Concrete slab surfaces should be sprayed 2 to 8 inches. Spray interior concrete or block foundation walls with a 24 inch band up from the slab area to prevent termite shelter tubes. A 1:1 (one gallon water to one gallon BOR-RAM) ratio will treat 400 square feet of concrete foundation wall area. Apply two coats of BOR-RAM on structural wood where access is limited to one or two sides of wood members such as sills and plates on foundation walls or wrapped sheathing; wait at least 20-30 minutes before applying second coat. Where accessible, apply BOR-RAM to the entire perimeter of the exterior structural wood areas at a 24 inch band beginning with the sill area and extending upwards. If the structure contains multiple stories, only treat the first story above the masonry foundation level. BOR-RAM may be applied to coated or painted structural wood by injecting solution into holes drilled at 8 to 10 inch intervals. Inject at 40 psi for 3-6 seconds per hole.

*Buildings on Slabs*

Apply BOR-RAM at a 1:1 (one gallon water to one gallon BOR-RAM) ratio to all base plates, the bottom 24 inches of all studs, all exterior and interior walls and 2 to 8 inches of concrete surface from the plates. Apply two coats of BOR-RAM on structural wood where access is limited to one or two sides of wood members such as sills and plates on foundation walls or wrapped sheathing; wait 20-30 minutes before applying second coat. Apply a minimum 24 inch wide barrier of treatment to all structural wood in plumbing walls and structural wood adjacent to plumbing, electrical conduit and duct penetrations. Treat all slab surfaces at least one foot out from all bath trap penetrations and all plumbing penetrations at least 24 inches up from the slab using a 1:1 (one part water to one part BOR-RAM) ratio. Plumbing penetrations not associated with any structural wood must be sprayed up from the non-soil surface to 24 inches high and covering at least six inches of slab surface area with a 1:1 (one part water to one part BOR-RAM) ratio.

*Foam Insulation*

Apply BOR-RAM to foam insulation by injecting the solution into the infested area. If a low-pressure surface sprayer is used, one gallon of solution will cover 300-400 square feet of infested area. The combination of injection and spraying is recommended for insulation types such as polyisocyanurate and extruded polystyrene due to their closed cell structures that reduce penetration from surface application.

*Drywood Termites and Powderpost Beetles*

Apply one coat of a 5:1 (5 gallons water to 1 gallon BOR-RAM) ratio to all structural wood surfaces until the surface is saturated. For wood members with only one or two exposed sides, apply two coats of BOR-RAM solution; wait at least 20-30 minutes between applications.

**Treatment of Wood Less Than Two Inches Thick (Decks/Sheds/Fences)**

When treating wood surfaces less than two inches thick such as decks, sheds and fences, BOR-RAM must be applied to bare wood. All paint or other wood finish must be removed prior to treatment. Apply one coat to all wood surfaces until saturated. For wood members with only one or two exposed sides or heavily infested areas, apply two coats of BOR-RAM solution; wait 20-30 minutes between applications. BOR-RAM should not be applied during rain or snow. Treated areas need to be protected from the rain or snow for at least 48 hours. If rain or snow is unavoidable, cover treated areas with a tarp or plastic covering.

**Finishing and Maintaining Surfaces**

To maintain treated surfaces, a water-resistant finish such as paint or stain should be applied. It is important the treated surfaces are completely dry before applying any finish or topcoat. It is recommended to wait 48 hours, but no more than 6 weeks after treatment. Test a small area with the finish or topcoat before applying to entire surface area.

**Treatment of Wood Greater Than Two Inches Thick (Logs/Timbers/Beams/Pilings)**

When treating wood members greater than two inches thick such as logs, timbers, beams and pilings, BOR-RAM must be applied to bare wood. All paint or other wood finish must be removed prior to treatment. Apply a 1:1 (1 gallon water to 1 gallon BOR-RAM) ratio until all surfaces (interior and exterior) are saturated. To treat round logs 10" or greater in diameter, rectangular logs larger than 6"x12", log ends, notches, corners or sill logs, two coats of BOR-RAM are required; wait one hour between applications. BOR-RAM should not be applied during rain or snow. Treated areas should be protected from the rain or snow for at least 48 hours. If rain or snow is unavoidable, cover treated areas with a tarp or plastic covering.

**Dip Treatments**

Dip treat by first mixing a 5:1 (5 parts water to 1 part BOR-RAM) ratio which contains a 9% active ingredient. Logs and lumber should be submerged into solution for at least one minute until all captured air has been removed and the solution covers all wood surfaces. BOR-RAM should be protected from the rain or snow for at least 48 hours. If rain or snow is unavoidable, cover treated areas with a tarp or plastic covering.

## Control of Algae to Cellulosic Building Components

BOR-RAM may be applied for the prevention and remedial control of algae to cellulosic building components such as drywall and insulation in new construction or existing structures. All painted, sealed or stained coatings should be removed prior to treatment to surfaces. For drywall and insulation, BOR-RAM should only be applied to the back paper side. If drywall has been installed and insulation is enclosed, a misting machine or applicator may be used to apply BOR-RAM. One gallon of solution will cover 400 square feet. Refer to dilution ratio table for mixing rates.

## Total Wood Preservative

BOR-RAM is a wood preservative against brown rot, white rot, fungi (rot) and wood destroying insects including beetles, termites and carpenter ants. For optimal results, treated material should not be exposed to rain, moisture or have contact with the ground.

### *General Information*

BOR-RAM will eliminate infestations and provide lasting protection against the following: Subterranean Termites (Reticulitermes, Heterotermes, Coptotermes), Drywood Termites (Kaloterme, Incisitermes), Dampwood Termites (Zootermopsis), Powderpost Beetles (Lyctidae, Bostrichidae), Anobiid Beetles (Anobiidae), Old House Borers & Longhorn Beetles (Cerambycidae) and Carpenter Ants (Camponotus).

### *Surface Preparation*

Apply BOR-RAM to bare wood only. Surfaces should be free of all previous finishes, water repellants, dirt or other contaminants. Mold or mildew should be removed by using an effective wood cleaner followed by a thorough rinse with water.

### *Treatment of Dimensional Lumber, Plywood and Exterior Wood Surfaces*

All paint or finishes applied to wood should be removed prior to treatment. Apply one coat to wood surfaces until surface saturation is achieved as follows:

- Remedial treatment of wood infesting insects 1:1 solution (1 part water to 1 part BOR-RAM)
- Remedial treatment of fungi (rot) 3:1 solution (3 parts water to 1 part BOR-RAM)
- Prevention treatment of insects or fungi 2:1 foam or mist (2 parts water to 1 part BOR-RAM)
- Prevention treatment of insects or fungi 5:1 solution (5 parts water to 1 part BOR-RAM)

For wood members with only one or two exposed sides or heavily infested areas, apply two coats of BOR-RAM solution. BOR-RAM should not be applied during rain or snow and treated areas should be protected from the rain or snow for at least 48 hours. If rain or snow is unavoidable, cover treated areas with a tarp or plastic covering.

*Treatment of Logs, Timbers and Large Beams*

All paint or finishes applied to wood should be removed prior to treatment. Surfaces should be free of all accumulated dirt or other contaminants. Apply a 1:1 (1 part water to 1 part BOR-RAM) ratio to all interior and exterior surfaces by spray or brush until the point of runoff. To treat round logs 10" or greater in diameter or rectangular logs larger than 6"x12", log ends, notches, corners or sill logs, two coats of BOR-RAM are required; wait one hour between applications. BOR-RAM should not be applied during rain or snow and treated areas should be protected from the rain or snow for at least 48 hours. If rain or snow is unavoidable, cover treated areas with a tarp or plastic covering.

*Dip Treating Logs and Lumber*

Dip treat by first mixing a 5:1 (5 parts water to 1 part BOR-RAM) ratio which contains a 9% active ingredient. Logs and lumber should be submerged into solution for at least one minute until all captured air has been removed and the solution covers all wood surfaces. BOR-RAM should be protected from the rain or snow for at least 48 hours. If rain or snow is unavoidable, cover treated areas with a tarp or plastic covering.

*Finishing and Maintaining Surfaces*

To maintain treated surfaces, a water-resistant finish such as paint or stain should be applied. It is important the treated surfaces are completely dry before applying any finish or topcoat. It is recommended to wait 48 hours, but no more than 6 weeks after treatment. Test a small area with the finish or topcoat before applying to entire surface area. Most interior surfaces do not require the finish or topcoat, except if they are contact with constant humidity or moisture (i.e., shower stalls, bath houses, saunas, etc.).

*Retention Rates*

A mixed solution of one gallon of water with one gallon of BOR-RAM will cover 800 board feet of wood to a minimum retention level of 0.084 pounds per cubic foot boric acid equivalent (BAE). Use the following formulas to calculate the amount of BOR-RAM needed for the volume of wood being treated (not just the surface area):

Dimensional Lumber: Thickness (inches) x Width (inches) x Length (feet) ÷ 12 = Board Feet

Note: this calculation should be performed with the **actual** lumber dimensions and not the "rough sawn" dimensions normally associated with dimensional lumber.

Log Homes: Height (inches) x Thickness (inches) x Perimeter (feet) x # of Courses ÷ 12 = Board Feet

For siding and paneling, a mixed solution of one gallon of water with one gallon of BOR-RAM will cover 800 square feet of 1 inch thick wood by spraying one side. If siding or

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paneling is ½ inch thick, a mixed solution of one gallon of water with one gallon of BOR-RAM will cover 1,600 square feet.

### **For Mold Prevention on Building Materials**

For mold prevention on building materials such as wood, concrete, gypsum wallboard and masonry block and control of rot and decay fungi and protection from listed wood destroying insects and beetles, BOR-RAM can be tank-mixed with Mold-Ram fungicide. Mix BOR-RAM with water at a ratio of 1 gallon BOR-RAM to 5 gallons of water and add 15 oz of Mold-Ram (2.5 oz per gallon) to the BOR-RAM/water mixture.

For mold prevention on building materials such as wood, concrete, gypsum wallboard and masonry block and control of rot and decay fungi and protection from listed termites and wood destroying insects and beetles, BOR-RAM can be tank-mixed with Mold-Ram fungicide. Mix BOR-RAM with water at a ratio of 1 gallon BOR-RAM to 1 gallon of water and add 5 oz of Mold-Ram (2.5 oz per gallon) to the BOR-RAM/water mixture.

### **STORAGE AND DISPOSAL**

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

**Pesticide Storage** - Store in a cool and dry storage area not accessible by children or pets. It is recommended that the product be stored in a locked storage area. Do not allow product to freeze.

**Pesticide Disposal – If empty:** Do not reuse empty container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.



LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, off-target movement, non-conforming application techniques, the presence of other materials, the manner of use or application, or other unknown factors beyond the control of Sostram Corporation. These risks can render the product ineffective or damage non-target surfaces.

Sostram Corporation does not agree to be an insurer of these risks beyond what is expressly warranted by this label. When you buy or use this product, you agree to accept these risks.

Sostram Corporation warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

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