

72304-10

03-24-2009

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MAR 24 2009

Joseph W. Burley, Ph.D.  
Technical Director  
SOSTRAM Corporation  
300 Colonial Center Parkway, Suite 230  
Roswell, Georgia 30076

Subject: Labeling Amendment  
BOR-RAM  
Registration Number: 72304-10  
Application Date: March 16, 2009  
Decision: 847078

Dear Dr. 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,



Kimberly Nesci  
Product Manager (11)  
Insecticide Branch  
Registration Division (7505P)

Enclosure: Stamped Approved Label



**ACCEPTED**  
 MAR 24 2009  
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 72304-10

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**Termiticide, Insecticide and Fungicide Concentrate**

For the prevention and control of: Termites, Carpenter Ants, Wood Infesting Beetles, Cockroaches, Decay Fungi, and Algae

For use in and around: Residential, Commercial, Industrial and Institutional, Fixed and Mobile, Structures and in Vehicles. Limit use to non-food areas in establishments, which store, sell or process food.

**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>	
<p><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></p>	

SEE FOLLOWING 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 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 up 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. Do not make topical applications on materials protected by an intact water-repellent barrier such as: paint, stain or sealer.

### 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.

### Wood Preservative

BOR-RAM is a comprehensive wood preservative. BOR-RAM will control infestations of, and provide protection against, brown rot, white rot, fungi (rot), algae and the following wood destroying insects: beetles, termites and carpenter ants. When used in combination with a specified broad-spectrum fungicide BOR-RAM will prevent surface mold. Apply only to bare wood: if necessary, remove any existing surface coating, dirt and biological growth (mold, mildew and algae). For optimal results, do not expose treated material to moisture or ground contact. For exterior use do not apply during periods of precipitation and always apply a protective waterproof coating after treatment.

### Mixing Instructions

BOR-RAM is a concentrated solution that must be diluted with water before use. Cold water is adequate but mixing will be accelerated by the use of warmer water and also by the use of an appropriate, hand held mixing device. It is recommended that the mix water be added first, followed by a controlled addition of BOR-RAM. Never reverse the addition sequence or prepare the treatment solution directly in the spray application equipment. When using equipment with an auxiliary mixing tank, add water and start the recirculation system before the BOR-RAM addition. Always ensure that the treatment solution is completely homogeneous before starting the application since incompletely dissolved concentrate will cause an inconsistent application or instability.

***[Mixing Ratios: All references to mixing ratios expressed herein are to volume/volume mixtures of water to BOR-RAM.]***

Do not store concentrated solutions (ratios of 1:1, 2:1 or 3:1) for more than 24 hrs. Use these solutions within this period. Always clean mixing tanks, transfer lines and spray equipment with water after use and on a daily basis.

BOR-RAM may 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 label. 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.

**Application**

Apply by hand sprayer, backpack sprayer, hand volume pumping system, brush, roller, mister, injection system or foaming device. Use application equipment appropriate for the application and use site. Make all applications to the point of saturation.

Where appropriate, an optional spray pattern indicator may be used to ensure that comprehensive treatment is obtained. Refer to, and follow, the dye or pigment manufacturer's instructions. In visible areas (such as hardwood floors or window-frames) where permanent marking will be an issue, a spray pattern indicator is not recommended.

**Dilution Ratio Table:**

Target Insect/Pest	Application (Ratios are Water to BOR-RAM)
Subterranean Termites (including Formosan termites)	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	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	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	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.
Decay Fungi and Algae (see footnote)	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 and for cellulosic wallboard and insulation. Apply 5:1 ratio for all preventative treatments.

Footnote: BOR-RAM may be used in addition to other fungicides

## 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 a supplemental pretreatment to protect wood from subterranean termites that may penetrate chemical gaps occurring in termiticide-treated soil. When active infestations exist, get the structure inspected by a licensed termite control professional. Prior to using this product, you should consult with your state regulatory agency to see if they require additional qualifications for the person applying this product.

## Target Pests

BOR-RAM will provide protection against the following insects:

- Ambrosia Beetles (*Platypodidae*, *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 (*Kaloterms*, *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 seiparium*, *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 lueto-olivacia*, *Phoma herbarum*, *Phoma lanosa*, *Polyporus abietinus*, *Polyporus rugolus*, *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., *Scerlaphoma pityophila*, *Serpula lacrymans*, *Sistotrema brinkmeni*, *Stereum abietinum*, *Torulla* spp., *Trametes lilacino-gliva*, *Trametes serialis*, *Trichlocladium asperum*

With the exception of food contact surfaces and cellulosic materials protected by an intact water impermeable coating BOR-RAM may be applied to all cellulosic materials (including wood, wood composites, engineered wood and paper based products) and masonry, metal, vinyl and other non-cellulosic construction elements protected from precipitation as a treatment to prevent subterranean termite infestation and tubing over these materials.

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 of soap and water to clean tools after application is recommended.

The application of BOR-RAM to wood surfaces in new construction or inside wall voids in existing structures helps control cockroaches that may come in contact with treated surfaces. One gallon of BOR-RAM 1:1 solution should cover 400 square feet of treated surface area.

### **Remedial Treatments**

When used as a remedial treatment, BOR-RAM will eliminate and prevent infestation of Formosan and native subterranean termites, dampwood and drywood termites, wood-boring beetles, carpenter ants and decay fungi.

Where affected wood components have less than three sides exposed, treat the area twice waiting a minimum of 20 minutes between applications. Likewise, if the infestations are severe also treat the infected area twice. All applications to wood should be made to the point of saturation.

### *Accessible Areas*

For cavities and galleries created by labeled insects (see Target Pests) in wood, either spray or inject BOR-RAM solution at the labeled rate (see Dilution Ratio Table) until the damaged area is completely saturated and cavities are completely filled. Treat susceptible areas adjacent to the attack site. Treat areas of decay in the same fashion.

### *Basements and Crawl Spaces*

Apply BOR-RAM solution to infested areas of structural wood components including any wood exposed to vertical access from the soil or foundation wall penetration. One gallon of BOR-RAM solution should cover 400 square feet of wood surface area.

In order to prevent termite shelter tubing, treat to the point of runoff a 24inch band of the masonry walls up from the concrete slab or dirt floor with the 1:1 solution. If accessible also treat the concrete slab/basement floor 8 inches out from the masonry walls. Treat the area around utility entry points with the same concentration solution ensuring that both horizontal and vertical aspects are treated to a distance of not less than 12 inches from the penetration. Apply to a height of 24 inches on protruding utilities and any wood in close proximity to the utilities.

### *Wood Flooring*

Remove any pre-existing surface coating by abrasion or use an aggressive cleaner. Apply BOR-RAM to wood flooring by spray, brush or roller. One gallon of BOR-RAM solution should cover 500 square feet of floor surface when mixed at the 2:1 ratio. Make two applications when treating infestations of subterranean termites. Wait a minimum of 60 minutes between applications. Treated wood must be allowed to dry completely (moisture content not more than 10% (as determined by a moisture meter) before



applying new protective coatings. The time to drying will be dictated by factors such as wood species, temperature and humidity but typically 2-3 days will be required to ensure complete drying. If any surface residue remains after this period remove with a moist cloth. Once dry, prepare the surface for re-coating. Application of BOR-RAM treatment solution or removal of any residues may cause the grain of the wood to raise. If necessary, dry sand and wipe with a damp cloth. It is advisable to "spot test" an inconspicuous area of the floor before proceeding to complete the coating application.

### *Non-Accessible Areas*

Surface application will not adequately address cavities or insect galleries in wood identified by a subsurface detection device (such as an acoustical emissions detector). Gain access via small holes and apply enough solution to completely fill the voids. Use the 1:1 ratio for all listed insects but consult the Dilution Ratio Table for addressing decay. Pressure-inject adjacent intact wood via access holes at 8 to 10 inch intervals within a radius of 24 inches of the infested wood: inject at 40 psi for 3-6 seconds per hole. Intact wood, adjacent to infested wood framing components, may also be accessible via stud voids.

For infestations in stud walls treat an area at least 6 feet out from the identified infestation and include targeted treatment of the base-plate areas (a frequent point of penetration). Gain access to stud voids via small holes in the wallboard and use spray application, misting or foaming to address infestations. Space access holes appropriate to framing configuration and adequate to reach all spaces between the studs in the target areas. Consult the Dilution Ratio Table for appropriate dilution ratios and apply enough formulation to saturate the target areas. Where possible, move insulation for enhanced access to the infested areas. Otherwise, see *Insulation* paragraph below. In slab construction treat an area of the concrete slab 8 inches out from the wall in the treatment zone.

### *Misting*

Follow manufacturer's guidelines for loading and operation of the misting machine.

### *Foam Application*

Consult the dilution ratio table for appropriate solution concentration information. Use an expansion ratio between 20 and 30 (one part BOR-RAM in 20 – 30 parts final foam). Employ a suitable foaming agent and follow manufacturer's recommendations for quantity to use to obtain the required expansion rate. When applying BOR-RAM as foam into void spaces, inject foam at the lowest accessible point in the void area until the foam exits an access hole located near the top of the void.

### *Insulation*

Where possible, move insulation for enhanced access to the infested area. Otherwise, apply the 1:1 ratio to foam insulation by injecting the solution into the infested area. Make a supplemental spray treatment when the foam is not easily penetrated by injection.

## Preventative Treatments and Pretreatments

**For application in new constructions in Florida and Louisiana**, 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 the 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 8 inches onto the slab.

Structural wood comprises the basic wooden components required to construct the building structure. These components are normally present at the dried-in-stage of construction and include wood in direct contact with foundations, wooden sill plates, wood studs, wooden or cellulosic sheathing, floor joists, beams and sub-flooring, roof trusses, top-plates, ceiling joists, roof decking and rafters.

Perform primary pretreatments following final framing inspection and when most access to all structural wood members is available. If a primary pretreatment is made before the final framing inspection, a second application may be necessary to ensure effectiveness and complete coverage of any modifications or additional building components.

Make all applications to the point of saturation.

BOR-RAM can also be used as a supplement to fumigation.

When performing applications to studs, sill plates or other wood members where less than 3 sides are exposed, treat the item twice waiting a minimum of 20 minutes between treatments. Treat both sides of exposed sheathing but if exterior sheathing is inaccessible (eg. wrapped), treat the interior side twice.

When making applications to exterior wood members, ensure that the surface is clean and free of any pre-existing coating. Remove such coatings by abrasion or use an aggressive surface cleaner. Do not make treatments while precipitation is occurring. Following treatment, cover the treated areas with a tarpaulin or other waterproof membrane if rain or snow is likely. Once completely dry (time is dependent upon ambient temperature and humidity): overcoat the treated areas with a waterproof coating. This application will extend the lifetime of the borate treatment.

### *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 decay fungi. For optimal results, apply BOR-RAM during the “dried-in” stage of construction when the most access to all structural wood members is available and prior to installation of insulation and mechanical systems.

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

Treat the following areas with the 1:1 ratio:

- 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

Treat the following areas with the 5:1 ratio:

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

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 the 1:1 ratio.

*Buildings on Crawl Spaces and Basements*

Apply BOR-RAM at the “dried-in” stage of new construction when all structural wood and sheathing is in place, but prior to insulation. As a primary treatment for subterranean termites in crawlspaces and basements apply at the 1:1 ratio in a 24-inch wide continuous horizontal band in from the exterior foundation walls and out from the support piers until all structural wood surfaces in crawl spaces and basements are saturated. Apply a continuous 24-inch vertical band up from the top of the exterior concrete or block walls. Include all sills, plates, floor joists, piers, girders, subfloors, sheathing and all structural wood exposed to direct vertical access from the soil. If there is no contact between structural wood and crawlspace or basement foundation walls at the first floor level, treat structural wood with a 24-inch band at the 1:1 ratio at the first point of contact with non-cellulosic (steel or masonry) walls. Prevent termite shelter tubes on crawl space walls and piers by applying a 1:1 ratio to concrete or block walls and piers in a 24inch band up from the ground on the interior side of all wall surfaces and all surfaces of the support piers. Typically, one gallon of solution will cover 400 square feet of surface area. When treating structural wood areas adjacent to plumbing, electrical conduit and ducts which penetrate sub-floors and provide a direct access from the soil or foundation wall

penetrations, treat a 24 inch band in this area. Apply BOR-RAM to all structural wood framing elements in finished-out basements where structural wood framing is adjacent to the exterior foundation walls. Apply BOR-RAM in an 8-inch band to the concrete slab surfaces out from the basement wall. Spray both exterior and interior concrete or block foundation basement walls with a 24-inch band up from the slab area. Where accessible, apply BOR-RAM to the entire perimeter of the exterior structural wood areas as a 24-inch band up from the top of the exterior concrete or block walls. If the structure contains multiple stories, only treat the first story above the masonry foundation level. Treat all interior structural wood elements of the first story within 24 inches of the exterior masonry foundation wall with the 1:1 ratio. 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*

As a primary pretreatment for subterranean termites apply BOR-RAM at the 1:1 ratio to all base plates, the bottom 24 inches of all studs, the bottom 24 inches of all walls (including steel, concrete, masonry, block and brick). Treat only the inside of exterior masonry walls. Also treat 8 inches out onto the concrete slab surface from the plates and from exterior masonry walls.

Where accessible treat both sides of exterior sheathing. 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 the 1:1 ratio. Critical areas such as plumbing penetrations, utility entry sites, shower drain penetrations, expansion joints, foundation cracks and abutting slabs (or other termite entry points) 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 out from the penetration with the 1:1 ratio.

In structures comprised of less than 60% wooden base-plates, where structural wood (such as roof trusses, top-plates, etc.) or cellulosic sheathing contacts non-wood framing or exterior masonry walls apply the 1:1 ratio to all cellulosic components in a 24 inch band around the contact point. Treat structural cellulosic components (such as wall framing) in contact with exterior masonry walls.

### *Foam Insulation*

Apply BOR-RAM at the 1:1 ratio to easily penetrated foam insulation by injecting the solution or by low-pressure spray application. Use a combination of these applications to treat foams, which are not easily penetrated.

### **Other Target Pests**

Consult the "Dilution Ratio Table" for BOR-RAM concentrations applicable to preventative treatments for listed target pests. Make all applications to the point of saturation. Duplicate the treatment to any wood components, which have less than 3 sides

exposed or where infestations are severe. Wait a minimum of 20 minutes between applications. Post treatment emergence of wood boring beetles is possible but will rarely cause structural damage and will not give cause for concern.

### **Treatment of Exterior Wood**

In addition to residential or commercial building components (such as eaves, soffits, facias and siding) exterior use includes such constructions as fences, decks and gazebos, porches, sheds and log structures, but not wood in ground contact. The presence of mold and mildew and/or algae on exterior building components indicates the presence of a persistent moisture issue. Address the moisture issue and remove mold and mildew with an appropriate cleaning product prior to performing any treatment to these areas. For preventative mold and mildew treatments with BOR-RAM consult the "Mold Prevention on Building Materials" section of this label. Remediate algae with BOR-RAM according to the "Dilution Ratio Table" of the label. Prevent algal infestations by application of the 5:1 ratio solution.

For remedial insect treatments apply the 1:1 ratio to the point of saturation. For preventative insect treatments consult the Dilution Ratio Table for appropriate dilution ratio information and apply to the point of saturation. Make duplicate treatments to wood members with less than 3 sides exposed or where infestations are severe. Wait a minimum of 20 minutes between applications. Treat twice log sills and larger dimensional lumber or items such as poles, posts, beams and pilings, which have a cross-sectional area greater than 70 square inches. When treating larger items extend the wait period between treatments to three times that for small dimension lumber.

When making topical applications to exterior wood members, ensure that the surface is clean and completely free of any pre-existing coating. Remove such coatings, and any mold, mildew and algae, by abrasion or with an appropriate surface cleaner. Rinse the surface with water to remove any remaining residues and allow to dry. Do not make treatments while precipitation is occurring. Following treatment, cover the treated areas with a tarpaulin or other waterproof membrane if rain or snow is likely. Once the treated item is completely dry (time is dependent upon ambient temperature and humidity), overcoat the treated areas with a waterproof coating. This application will extend the lifetime of the borate treatment. As with many other protective or decorative coatings, ensure that the surface is free of any residues and, if required, apply light sanding before the initial coat and/or between any subsequent coats. It is recommended to "spot test" an inconspicuous area of the item before proceeding to complete the coating application.

### **Treating Log Structures, Timbers and Beams**

Treat log structures, timbers, beams and other large cross section (greater than 70 square inches) items according to the directions in the "Treatment of Exterior Wood" section. When treating log structures, treat crosscut areas twice. Prior to treatment, prepare both interior and exterior surfaces as described above. Clean dirt and other contaminants from uncoated interior wood with an appropriate surface cleaner and wash with clean water. Allow to dry before applying BOR-RAM. Coat treated exterior sections as described above. If desired, apply stain or other transparent coatings to treated interior wood. (This

will, however, complicate retreatment at a later date). Apply a water impermeable coating to interior treated wood in areas, which will receive frequent exposure to water.

When logs and lumber are available before construction commences these items may be dip treated as an alternative to treatment during or after construction. Dip treat by submerging wood in the 5:1 ratio solution for at least one minute or until emitted air is no longer obvious. The solution must cover all wood surfaces. Protect treated items from precipitation as described in the "Treatment of Exterior Wood" section. Drying time will be dictated by temperature and humidity and may take 2 – 3 days.

**Retention Rates**

A mixed solution of one gallon of water with one gallon of BOR-RAM should 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 should cover 800 square feet of 1 inch thick wood by spraying one side. If siding or paneling is ½ inch thick, a mixed solution of one gallon of water with one gallon of BOR-RAM should cover 1,600 square feet.

**Control of Algae on Cellulosic Building Components**

Treat existing algae or prevent new growth on cellulosic building components with BOR-RAM. Refer to Dilution Ratio Table for mixing rates. For spray application, one gallon of solution should cover 400 square feet. Spray, mist or foam enclosed areas such as stud voids to treat wallboard or insulation.

**For Mold Prevention on Building Materials**

For mold prevention on building materials such as wood, concrete, gypsum wallboard and masonry block and for 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 container is empty:***

One-gallon HDPE containers: Non-refillable container. Do not refill or reuse this container. Offer for recycling, if available. Triple rinse container promptly after emptying. Triple rinse as follows: Empty remaining contents into a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

[250 gallon HDPE totes: Non-refillable container. Do not refill or reuse this container. Offer for recycling, if available. Pressure-rinse container promptly after emptying. Pressure rinse as follows: Drain remaining contents of the container into a suitable vessel, pour into mix tank and continue to drain for 15 minutes after the flow begins to drip. Insert pressure rinsing nozzle into the container and rinse the entire inside at about 40 psi for at least 30 seconds. Collect rinsate and allow to drain for 1 minute after the flow begins to drip. Pour rinsate into mix tank or store for later use or disposal. Repeat this procedure two more times.]

**If container is partly filled:** Call your local solid waste agency for disposal instructions. Never pour unused product down any indoor or outdoor drain.

LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read this Limitation of Warranty and Liability Before 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.

To the extent consistent with applicable law, Sostram Corporation makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty.

To the extent consistent with applicable law, in no event shall Sostram Corporation or its representative be liable for any incidental, consequential or special damages resulting from the use or handling of this product. Buyer's or user's bargained-for expectation is efficacy against termites, insects and fungi. To the extent consistent with applicable law, the exclusive remedy of the user or buyer and the exclusive liability of Sostram Corporation or the seller, for any and all claims, losses, injuries or damages (including claims based on breach of warranty or contract, negligence, tort or strict liability), whether from failure to perform or damage resulting from the use or handling of this product, shall be the return of the purchase price of the product, or at the election of Sostram Corporation or its representative, the replacement of the product.

To the extent consistent with applicable law, Sostram Corporation or its authorized representative must have prompt notice of any claim so that an immediate investigation of claim can be made. Buyer and all users shall promptly notify Sostram Corporation or its authorized representative of any claims, whether based on contract, negligence, strict liability, or other tort or otherwise be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.