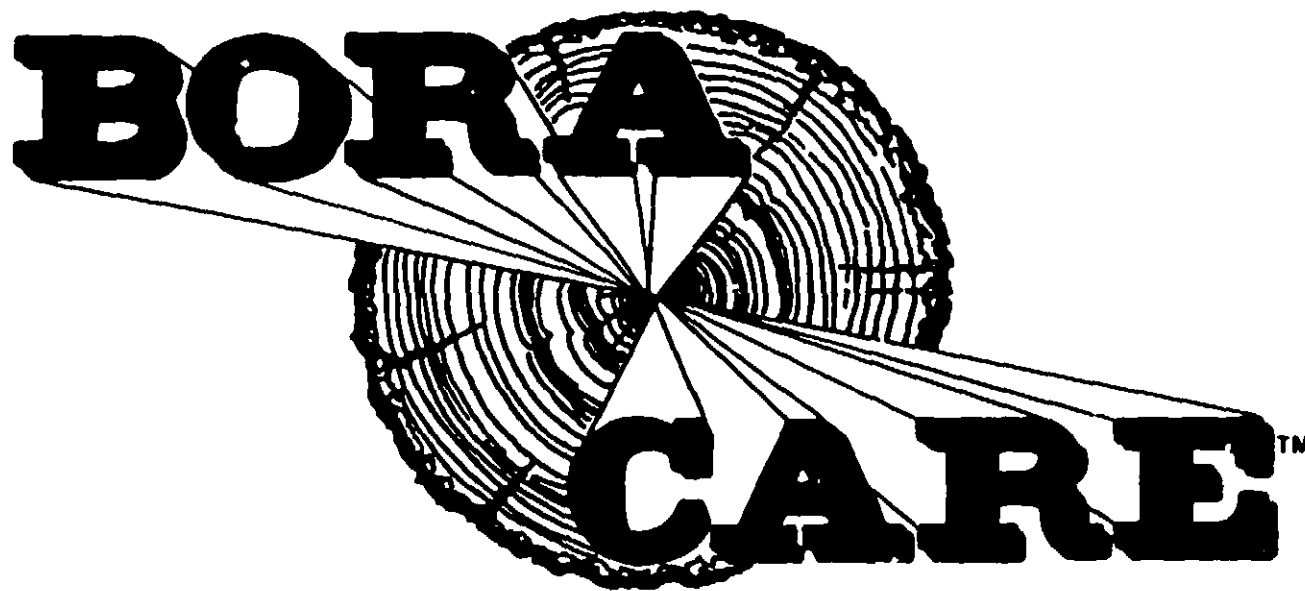

TOTAL WOOD PRESERVATIVE

A Wood Preservative for Protection and Treatment of Wood Against Fungal Decay,
Wood Destroying Insects, Termites and Carpenter Ants.



Mr. Vincent R. Palmere
Perma-Chink Systems, Inc.
1605 East Prosser Road
Knoxville, TN 37914

265249 / 310
3287347 / 18

Dear Mr. Palmere:

Subject: Revised Labeling - Add Treatment of New and Existing Buildings
Bora-Cure
EPA Registration No. 59905-3
Your Submission Dated May 30, 1990

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable provided that you:

1. Make the labeling change listed below before you release the product for shipment bearing the amended labeling:
 - In the Environmental Hazards section, reinstate "Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters."
2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

Carl Swable for

Susan Lewis
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

54317:I:Stone:LR-13:KENCO:7/9/90:8/5/90:EK:VO:DD:EK

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

Specimen Label

OCT 22 1998

Rev. 1, 5/29/90

BORA-CARE™

Termiticide, Insecticide and Fungicide Concentrate

For the control of:

**TERMITES, CARPENTER ANTS, WOOD DESTROYING BEETLES
and WOOD DECAY FUNGI**

Designed for sale to and use by Professional Pest Control Operators.

ACTIVE INGREDIENT:

Disodium Octaborate Tetrahydrate ($\text{Na}_2\text{B}_8\text{O}_{13} \cdot 4\text{H}_2\text{O}$):..... 40.0% by weight
INERT INGREDIENTS:..... 60.0% by weight

DENSITY: 11.51 pounds per gallon

EPA Registration No. 59905-3

EPA Establishment No. 59905-TN-1

Patent Pending

KEEP OUT OF REACH OF CHILDREN

CAUTION

See other panels for additional Precautionary Information.

PRECAUTIONARY STATEMENTS: HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS:

CAUTION

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

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Immediately contact a physician or Poison Control Center. If these are unavailable, give the victim 1 or 2 glasses of water and induce vomiting by touching back of throat with fingers. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN: Remove contaminated clothing and wash skin with soap and water.

IF INHALED: Remove victim to fresh air.

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.

STORAGE AND DISPOSAL

Do not contaminate food or feed by storage or disposal.

STORAGE: Store in 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. Pesticide spray solution or rinsate that cannot be used should be disposed of according to procedures approved by Federal, State, or Local disposal authorities.

CONTAINER DISPOSAL: Do not reuse empty container. Consult Federal, State or Local authorities for approved disposal procedures.

NOTICE

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

Before buying or using this product, read the "WARRANTY LIMITATIONS AND DISCLAIMER" statement found elsewhere on this label. If the stated terms are not acceptable, return unopened package to seller for full refund of purchase price. Otherwise, use by the buyer or user constitutes acceptance of the terms under WARRANTY LIMITATIONS AND DISCLAIMER.

IN CASE OF A MEDICAL EMERGENCY

Involving this product, call (815) 544-9400 or your local Poison Control Center.

DIRECTIONS FOR USE

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

BORA-CARE should be applied only to bare wood or to wood surfaces where an intact water repellent barrier is not present.

MIXING INSTRUCTIONS

BORA-CARE IS A CONCENTRATE WHICH MUST BE DILUTED WITH CLEAN WATER BEFORE USE.

HAND SPRAYERS: MIX IN A CLEAN CONTAINER AND STIR THE DILUTED SOLUTION UNTIL ANY CLOUDINESS DISAPPEARS. ALWAYS ADD THE DILUTED SOLUTION TO A SPRAY TANK. MIXING BORA-CARE DIRECTLY IN A SPRAY TANK CAN BLOCK HOSES AND NOZZLES.

HIGH VOLUME PUMPING SYSTEMS: ADD WATER TO TANK, START RECIRCULATOR, THEN SLOWLY ADD BORA-CARE CONCENTRATE. DO NOT LEAVE UNUSED SOLUTION IN TANK OVERNIGHT WHEN TEMPERATURES ARE BELOW 40 DEGREES F. USE DILUTED BORA-CARE WITHIN 48 HOURS AFTER MIXING.

DILUTION RATIOS by volume.

PARTS WATER	PARTS BORA-CARE	% DIODOLIM OCTABORATE TETRAHYDRATE
1	to 1	23%
2	to 1	16%
4	to 1	10%

Use a 1 to 1 BORA-CARE dilution ratio for subterranean and Formosan termites. Use either a 1 to 1 or 2 to 1 dilution ratio for all other insects and decay fungi. On firewood, use a 4 to 1 dilution ratio.

SAFE HANDLING PROCEDURES

The use of chemical splash goggles and solvent resistant gloves is advised. Spills and over-spray may be cleaned with a damp cloth.

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 designed for protection from organic vapors is recommended. (Refer to the BORA-CARE Material Safety Data Sheet for additional health and safety information).

GENERAL INFORMATION

BORA-CARE is an innovative termiticide, insecticide and fungicide that penetrates wood to provide permanent protection against:

Subterranean Termites:

Reticulitermes, Heterotermes

Formosan Termites:

Coptotermes

Dampwood Termites:

Zootermopsis, Neotermes

Drywood Termites:

Kaloterms, Incisitermes

Powder Post Beetles:

Lyctidae, Bostrichidae

Anobiid Beetles:

Anobiidae

Old House Borers, Long-horned Beetles:

Cerambycidae

Ambrosia Beetles

Platypodidae, Scolytidae

Carpenter Ants:

Camponotus

Wood Decay Fungi Including:

<i>Antrodia striosa</i>	<i>Phlebotomus heteromorphus</i>
<i>Antrodia variata</i>	<i>Phlebotomus lignicola</i>
<i>Aspergillus amstelodami</i>	<i>Phlebotomus luteo-olivaceus</i>
<i>Aspergillus niger</i>	<i>Phoma herbarum</i>
<i>Aureobasidium pullulans</i>	<i>Phoma lanosa</i>
<i>Basidiomycetes</i>	<i>Polyporus abietinus</i>
<i>Blasaria pusillus</i> 132	<i>Polyporus rugulosus</i>
<i>Ceratocystis platensis</i>	<i>Polyporus sulphureus</i>
<i>Ceratocystis picea</i>	<i>Polyporus tomentosus</i>
<i>Chaetomium globosum</i> 1412	<i>Polyporus versicolor</i>
<i>Cerophora cerebella</i>	<i>Polystictus versicolor</i>
<i>Cerophora olivacea</i>	<i>Poria carbonica</i>
<i>Cerophora puteana</i>	<i>Poria incrassata</i>
<i>Fomes lividus</i>	<i>Poria monticola</i> 606
<i>Fomes officinalis</i>	<i>Poria nigrescens</i> 4856
<i>Fomes pini</i>	<i>Poria placenta</i>
<i>Fomes pinicola</i>	<i>Poria subacida</i>
<i>Gloeophyllum abietinum</i>	<i>Poria vallensis</i>
<i>Gloeophyllum sepiarium</i>	<i>Poria vaperaria</i>
<i>Gloeophyllum trabeum</i>	<i>Poria variata</i>
<i>Herichia abietis</i>	<i>Rhinecladella</i> sp.
<i>Heterobasidium annosum</i>	<i>Sclerophoma phytophila</i>
<i>Lentinus lepideus</i>	<i>Serpula lacrymans</i>
<i>Lentulus trabea</i>	<i>Stictis brachymeria</i>
<i>Mendicium lacrymans</i>	<i>Stictis brachymeria</i>
<i>Ophiostoma coarctatum</i>	<i>Stictis brachymeria</i>
<i>Pseudomyces variol</i>	<i>Tenella</i> sp.
<i>Phlebotomus</i> sp.	<i>Trametes blacicolorata</i>
<i>Phlebotomus fastigiata</i>	<i>Trametes serialis</i>
<i>Phlebotomus hoffmanni</i>	<i>Trichocladium asperum</i>

In areas where a soil treatment / barrier termiticide treatment is required by law, BORA-CARE should be applied as a supplemental treatment to protect wood from subterranean termites that may penetrate chemical gaps occurring as a result of failure of soil treatment termiticides.

As a remedial treatment, BORA-CARE will prevent reinfestation of subterranean and drywood termites, wood boring beetles, carpenter ants and wood decay fungi.

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 volatilize out of the wood. Treatment is permanent as long as the treated material is not exposed to rain, continuous moisture or ground contact.

The active ingredient in BORA-CARE, disodium octaborate tetrahydrate, is toxic to many insects, decay fungi and some forms of bacteria. Although the efficacy of borates (salts containing the element boron) against insects such as termites and wood boring beetles is well documented, the actual mechanism of toxicity is not completely understood. The most accepted hypothesis is that boron kills the intestinal flora that allow some insects to digest food. Without them, these insects essentially starve to death.

When used according to label directions, BORA-CARE will provide enough borate to the wood to protect it. Those insects which eat the wood also ingest the borate, thus eventually killing the insects. Some wood damaging insects, such as carpenter ants, do not eat the wood but use the wood as nesting sites. While chewing, they exude chemicals which soften the wood for easier removal. In the process of releasing and absorbing these chemicals, the insects ingest the borate in the wood, thus killing them.

Once individual members of many ant and termite colonies begin to die after feeding on a particular food source, the rest of the colony usually stops feeding on that same source. Thus, borate treated wood may be avoided by those members of the colony still alive.

Older wood boring beetle larvae already present in the wood at the time of treatment may burrow deep into the wood ahead of the diffusing borate and emerge sometime after treatment. This should not occur frequently enough to cause structural damage to any wooden member.

I. REMEDIAL TREATMENT FOR THE CONTROL OF SUB- TERRANEAN, FORMOSAN, DRYWOOD AND DAMPWOOD TERMITES, CARPENTER ANTS, OLD HOUSE BORERS, ANOBIID AND OTHER WOOD BORING BEETLES AND WOOD DECAY FUNGI

Use a 1 to 1 BORA-CARE dilution ratio for subterranean and Formosan termites. Use either a 1 to 1 or 2 to 1 dilution ratio for all other insects and decay fungi. Apply diluted BORA-CARE solution to the point of runoff to infested areas and to those areas susceptible to infestation to include all exposed wood. Apply two coats of diluted BORA-CARE onto heavily infested areas, waiting at least 20 minutes between applications. When practical, inject diluted BORA-CARE solution into beetle holes, termites and carpenter ant galleries, and decay pockets.

Infested wood flooring can be treated by spray or brush application. It will be necessary to remove any existing finish by sanding or stripping prior to application. Apply a 2 parts water to 1 part BORA-CARE solution at a rate of approximately 1 gallon per 500 square feet of floor surface. For treating infestations of subterranean or Formosan termites, two coats may be necessary. Wait until floor is completely dry (normally at least 72 hours after treatment) before applying a new floor finish coating.

NOTE: If surface is tacky or residue is evident after 72 hours, wipe treated surface with a damp cloth and allow surface to dry prior to applying finish coat.

For treating wall studs and wood members not accessible by conventional application methods, spray solution into voids and channels in damaged and suspected infested wood and through small holes drilled into walls and baseboard areas. Use sufficient amount of coarse spray to cover the area to the point of runoff.

For treating confined spaces such as attics or crawl spaces, a fogging device may be used. A 2 to 1 dilution ratio (2 parts water to one part BORA-CARE) solution should be added to the fogging device reservoir. Fogger should be set to emit the smallest feasible droplet size. Fog the area with enough diluted solution to completely wet all exposed wood surfaces. Typically, it will take approximately one gallon of diluted solution to treat a space 400 to 800 cubic feet in volume. Fogging should only be used as a supplement to direct spray application of heavily infested areas. If fogging is for control of subterranean or Formosan termites, two separate applications will be necessary. Wait at least 24 hours between applications.

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

Roofs containing infested cellulosic materials may be treated by drilling holes through roofing surface in order to gain access to the infested area. Holes should be spaced no more than 3 feet apart in a grid pattern. Inject 8 fluid ounces of diluted BORA-CARE solution per every one square yard (9 sq. ft.) of roof surface. Be sure to patch all holes with suitable materials in order to prevent subsequent water infiltration.

II. PRETREATMENT FOR PREVENTION OF SUBTERRANEAN AND FORMOSAN TERMITES (CRAWL SPACE, BASEMENT and SLAB)

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

NOTE: This treatment will serve as a primary treatment for control of subterranean termites. However, in states where soil treatment is mandatory, BORA-CARE should be used as a supplemental treatment to ensure long term protection from termites that penetrate gaps in the barrier treatment.

A. BUILDINGS WITH CRAWL SPACES AND BASEMENTS

Apply a 1 to 1 dilution ratio, BORA-CARE solution to point of runoff to all wood surfaces in crawl spaces and basements, to include sills, plates, all floor joists, piers, girders, subfloors as well as wood exposed to vertical access from the soil. Treat base plates and all interior and exterior studs.

B. BUILDINGS ON SLABS

Apply diluted BORA-CARE solution (1 to 1 dilution ratio) to point of runoff to all wood in contact with the slab to include all base plates, and studs of both interior and exterior walls. Ensure that all sill plates and wood contacting garages and porches are treated. In cases where access is limited to one or two sides of a wood member, apply two coats of diluted BORA-CARE to the exposed surfaces. Wait at least 20 minutes between applications.

III. PRETREATMENT APPLICATION TO PROVIDE TOTAL PROTECTION FROM SUBTERRANEAN, FORMOSAN, DRYWOOD AND DAMPWOOD

TERMITES, CARPENTER ANTS, OLD HOUSE BORERS, ANOBIID AND OTHER WOOD BORING BEETLES AND WOOD DECAY FUNGI

Pretreatment should be performed at a point during the construction process when greatest access to all wood members is available. Normally, this is at the "dried-in" stage of construction prior to installation of insulation, plumbing, electrical wiring, interior wall coverings, etc. Apply a 1 part water to 1 part BORA-CARE solution to all wood surfaces, ends and cracks at junctures to the point of runoff. Concentrate application in areas susceptible to attack, to include sills, plates, floor joists, piers, girders, subfloors and any wood exposed to vertical access to the floor. Treat all base plates and studs on exterior walls. Treat all studs 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 including all interior studs.

In attics, treat all exposed wood, including ceiling joists, trusses, top plates, soffits, 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 or two sides of a wood member, apply two coats of diluted BORA-CARE to the exposed surfaces. Wait at least 20 minutes between applications.

IV. POSTCONSTRUCTION TREATMENT (BASEMENTS AND CRAWL SPACES)

Use a 1 to 1 BORA-CARE dilution ratio for subterranean and Formosan termites. Use either a 1 to 1 or 2 to 1 dilution ratio for all other insects and decay fungi. Apply diluted BORA-CARE solution to the point of runoff to all wood surfaces including sill plates, piers, girders, subfloors, floor joists and any wood exposed to vertical access from the soil. Apply two coats of diluted BORA-CARE to wood where access is limited to one or two sides of wood members such as, sills and plates on exterior walls. Wait at least 20 minutes between applications.

NOTE: Post treatment of slab floor construction is generally impractical. However, localized infestations or suspected infestations may be treated where access can be gained to wood surfaces.