

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 24, 2015

Anna Crowder Regulatory Affairs Associate Nisus Corporation 100 Nisus Dr. Rockfor, TN 37853

Subject: Notification per PRN 98-10 – Addition of optional packaging sizes and other

minor label revisions.

Product Name: Nibor Borate Insecticide and Fungicide

EPA Registration Number: 64405-8 Application Date: August 31, 2015

Decision Number: 508876

Dear Ms. Crowder:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, you may contact Jennifer Gaines at 703-305-5967 or via email at gaines.jennifer@epa.gov.

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Sincerely,

Jennifer Urbanski, Ph.D.

Product Manager 04

Invertebrate & Vertebrate Branch 1

Registration Division (7505P)

Office of Pesticide Programs

{General Use Label}

Nibor® Borate Insecticide and Fungicide

{note to reviewer: these are previously approved ABN:

Tim-Bor Professional

Nibor-D, Nibor D

Cellutreat, Cellu-Treat)

TIFICATIO

64405-8

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/24/2015

Active Ingredient:	
Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)	%
Other Ingredient+ 2º	%
Total	%
⁺ Contains 2% H ₂ O – Absorbed Moisture	
PA Reg. No. 64405-8 EPA Est	
Net Wt:	
(1 lb. bag, 1lb. bottle, 1.5 lb. bag, 5 lb. pail, 5 lb. bag, 15 lb. pail, 25 lb. pail,	
50 lb. bag. 250 lb. drum. 250 lb. mini sack, and 2200 lb. super sack)	

CAUTION

Keep Out of Reach of Children

{For unit packages which are too small for full label or booklet}:

Nibor® Borate Insecticide and Fungicide

Active Ingredient:

Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)	. 98%
Other Ingredient+	. 2%
Total	. 100%
+Contains 2% H.O. Absorbed Maisture	

*Contains 2% H₂O – Absorbed Moisture

EPA Reg. No. 64405-8

EPA Est.

CAUTION

Keep Out of Reach of Children

Net Wt. [4 oz.] [6 oz.] [8 oz.] [1 lb.]

See [Booklet] [Outer Packaging] for First Aid, Precautionary Statements and Complete Directions for Use.

Not for individual resale

(End of small package labeling)

First Aid

If Swallowed:	Immediately call a poison control center or doctor for treatment advice.	
	Have person sip a glass of water if able to swallow.	
	Do not induce vomiting unless told to do so by the poison control center or doctor.	
	Do not give anything by mouth to an unconscious person.	
If Inhaled:	Move person to fresh air.	
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration,	
	preferably by mouth-to-mouth, if possible.	
	Call a poison control center or doctor for further treatment advice.	
If in Eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.	
	Call a poison control center or doctor for further treatment advice.	
Have the produc	Have the product container or label with you when calling a poison control center or doctor or going for treatmen	

(Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.

You may also contact 1-800-424-9300 for emergency medical treatment information.

[See Booklet for First Aid and additional Precautionary Statements]
[See side panel for First Aid and additional Precautionary Statements]

[Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)]

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

CAUTION: Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing dust. Thoroughly wash with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate; butyl, nitrile, neoprene and natural rubbers \geq 14 mils; polyethylene; polyvinyl chloride; and viton \geq 14 mils. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Applicators, mixers and other handlers must wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and protective eyewear. When applying this product in confined spaces, provide ventilation or an exhaust system; or use a NIOSH-approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-14G) or a NIOSH-approved respirator with any N, R, P or HE prefilter.

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.

{Product packaged in containers of 50 pounds or larger will bear the following Environmental Hazards statements:}

Environmental Hazards

This pesticide is toxic to fish and wildlife. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State water board or regional office of the EPA.

{Product packaged in containers less than 50 pounds will bear the following Environmental Hazards statements:}

Environmental Hazards

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

NOTICE

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

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

DIRECTIONS FOR USE

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

Product not for use on trees being grown for sale or other commercial use, or for commercial seed production, or for the production of timber or wood products, or for research purposes. Product is intended for treatment of tree stumps during and post-harvest to prevent for Annosus Root Disease (*Heterobasidium annosum* (Fr.) Bref.).

General Insect Control

Product Information

Nibor is a water soluble inorganic borate salt with insecticidal properties that can be applied as a liquid solution, mop solution or dust. Dry foam applications can be used when better adhesion to treated surfaces and minimal runoff is desired. Residual effects of Nibor will last longer in areas protected from weather and elements. It is effective as both a preventative and remedial treatment to kill and control general and nuisance pests such as, but not limited to, those listed below:

General Ants (including Argentine, Thief, Little Black, Pavement, Odorous House, Crazy and Ghost Ants), Boxelder Bugs, Carpenter Ants, Cluster Flies, Centipedes, Crickets (including House Crickets, Field Crickets and Camel Crickets), Darkling Beetles, Dust Mites, Earwigs, Flies, Fleas, Hide Beetles, Lady Bugs, Millipedes, Roaches (including German, Brown-banded, Smokey Brown, Brown, American, Australian and Oriental Roaches), Small Flies (including Fruit and Drain flies) and Silverfish.

Use **Nibor** in apartment buildings, bird and poultry production facilities, buses, carpet cleaning machines, factories, garages, grocery stores, homes, hospitals, hotels, industrial plants, kennels, libraries, manhole covers, markets, military bases, mobile homes, new construction, nursing homes, offices, public and private institutions, restaurants, sewers, schools, ships, theaters, trains, trucks, utilities, warehouses, yachts and zoos.

Nibor may be applied into cracks and crevices on outside areas of structures including cracks and crevices around windows, doorframes and other areas where insect pests may enter or to areas where insects hide, such as behind

baseboards, storage shelves and wall studs; between elements of construction, equipment and floors; in attics, attic insulation, block voids, box sills, cracks, crevices, eaves, equipment legs and equipment bases, voids and wall voids; in openings around pipes and sinks and openings leading to voids and hollow spaces in walls; on logs, lumber, moist areas plywood, railroad ties, soffits and utility poles; under refrigerators; and wood-foam composite structural components. Do not apply Nibor liquid solutions in conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

Application for Food processing and Handling Establishments, including Federally Inspected Poultry and Meat Plants: In food areas, only apply product into cracks, crevices and other inaccessible areas. Avoid introducing any product into the air. Avoid contamination of food and feed stuffs. Do not apply product directly onto a surface where food is prepared, served or stored. Any product left visible on a food surface after treatment should be removed and surface washed.

Food Areas Include: Serving Areas, such as dining rooms, food storage areas, receiving areas, processing areas, including enclosed systems such as oil and syrup plants, mills and dairies; Packing Areas, including canning, bottling, wrapping and boxing; and Edible Waste Storage Areas. In these areas, direct product applications into cracks and crevices, such as along baseboards and between elements of construction. Do not allow product on any surfaces that may be contacted by food. Do not apply when facility is in operation or when food is exposed.

Non-Food areas include: bathrooms, locker rooms, offices, maintenance rooms, mechanical rooms, trash rooms, garages, janitorial closets, storage areas after bottling or canning and floor drains leading to sewer entries. In these areas, apply product as labeled for other non-food areas.

Always test any materials to be treated for color fastness and potential staining. Product may leave a light residue on dark surfaces. This residue may be removed with a warm damp cloth.

Apply **Nibor** only in areas inaccessible to children and pets. Allow product to dry completely before allowing pets or children back on treated surfaces.

[Note: Spraying water on some wood species can mobilize natural wood extractives, raise the grain and leave behind calcium or other deposits. Prior to treating large areas, treat a small area with Nibor solution to ensure that you are satisfied with the final aesthetics.]

Preparation of a 15% Nibor Liquid Solution

Measure approximately 80% of the required volume of water to the mixing vessel. While stirring, gradually add Nibor powder into water. For liquid sprays or foams, add1.5 lbs (approximately 7.5 cups) of **Nibor** for each gallon of finished solution required. Or, if mopping, treating carpets, furniture, mold, mildew, or using a carpet cleaning machine, add only 8 ounces [oz.] (approximately 2.5 cups) of Nibor per gallon of water. Add remaining water to the mixing vessel and stir until **Nibor** has completely dissolved. Use this finished solution as soon as possible. Do not store for an extended length of time.

Nibor can be used in conjunction with an insect growth regulator (IGR) such as pyriproxyfen, hydroprene or methoprene, a fungicide/mildewcide, an emulsifiable disinfectant or a non-residual knock-down emulsifiable insect adulticide.

Preparation of a Nibor Foam Solution

To create a dry consistency foam, add a surfactant/foaming agent and a Nibor liquid solution into foaming application equipment. Generally 1-2 ounces of a foaming agent will create dry foam with the desired expansion ratio of 20:1 [20 ounces of foam to 1 ounce of mixed liquid solution]. Refer to the foaming equipment manufacturer's manuals and the surfactant labels for additional instructions.

Wash and rinse all equipment after each use.

Dust Application Instructions

No powder should be visible after application. Remove or brush any powder visible after application into cracks and crevices.

General and Nuisance Pests, including Lady Bugs: Apply Nibor as a dust into the cracks, crevices and void areas of exterior walls and around windows, doors eaves and soffits. Caulking should be applied after application to seal any available crack.

Refuse Containers: Apply to container at the rate of 12-20 ounces [oz.] per 250 square feet [ft2] of area.

Floor Drains: Apply 1-2 ounces <u>loz.</u> of dust into the drain opening followed by at least one quart of mop rinse water to control and prevent fly, including small fly, populations.

Sewers and Manhole Cavities: Apply as a dust at a rate not to exceed 12 oz. per 250 square feet [ft2] using a blower or air pressure equipment.

New Construction: When treating large areas such as wall voids or soffit and subcabinet voids in new and existing construction, dust liberally using dusting application equipment. Apply dust at 12-20 ounces [oz.] per 250 square feet [ft2].

Attic Insulation: Nibor can be applied to all insulation materials including cellulose, fiberglass and natural fiber. Make sure the areas around attic soffits and pipe protrusions are properly treated. Do not over-apply or reapply into previously treated attics unless the treated insulation has been removed or additional insulation is installed.

Rolled Insulation: Apply before or after installation at the rate of 1 oz. / 8 ft² of insulated area.

<u>Blown Insulation</u>: Apply to existing insulation at the rate of 2 oz. / 8 ft² of insulated area. If new insulation is to be installed over any type of existing insulation, apply at the rate of 1 oz. / 8 ft² to the existing insulation and then again to the new blown-in insulation. Add to blown-in insulation applicators at a maximum rate of 1-2 oz. / 8 ft² of insulation.

Liquid and Foam Application Instructions

Refuse Containers: Apply liquid or foam solution at a gallon per 200-250 square feet [ft²].

Floor Drains: Pour up to one quart of finished solution into each floor drain to prevent and control fly populations. This solution can also be applied as foam into drains.

Mop Solution: This is to be used as a supplemental treatment in conjunction with other pest management practices and may be reapplied as necessary. Apply only to floors by mopping. Allow the mop solution to penetrate into cracks and crevices in the tile or flooring and into crevice areas under equipment to affect possible hidden food sources and harborage areas that may contain small fly larva, including fruit fly and drain fly species and other insect pests. Remove or brush any powder visible after application into cracks and crevices.

Avoid introducing the material into the air or onto any exposed surfaces other than the floor area. Avoid contaminating food or food processing surfaces. Do not apply when foods are exposed or facility is in operation. Do not contaminate feed and foodstuffs.

Carpets and Furniture: A Nibor carpet treatment will contaminate the food source of flea larvae and dust mites and will kill them. This application will remove organic food sources and cast skins and force Nibor into the carpet fibers to provide a residual to prevent future infestations.

First, clean and thoroughly vacuum all areas to be treated, including surfaces under furniture and beds, and in areas where animals sleep or rest. Remove cushions and vacuum crevices of furniture. Discard vacuum bag after use.

Apply solution with an even fan spray at the rate of 1 gallon to every 300-400 ft² of carpet surface area. If carpet pile is dense, use a brush or carpet rake in conjunction with the application, to ensure penetration into the carpet pile. Treat crevices and undersides of couches, chairs and pet bedding. Allow furniture to dry before replacing cushions, bedding, pillows, etc. **Do not saturate**.

When wood floors, tile floors, cracks, crevices and baseboards are treated, wipe excess solution off exposed surfaces with dry cloth or cleaning pad. Concrete and dirt floors can be treated with a light application. Avoid walking on treated surfaces until dry.

<u>Extraction or Steam Carpet Cleaning Machines:</u> Add carpet cleaning detergent to the Nibor finished solution if desired. Add the mixed solution into the dispensing tank of the carpet cleaning machine. Apply 1 gallon of mixed solution to every 150-200 ft² of carpet area. Thoroughly clean carpet cleaning machine dispensing tank and run water through machine to flush after use.

To Control Mildew and Fungus (except in California): Apply to kill and control mildew and fungus in conjunction with conventional moisture control practices such as repairing leaking structural components or leaking pipes, lowering interior humidity levels and, where possible, providing adequate ventilation. Apply as a spot treatment to affected surfaces, including baseboards and wall areas.

Flies, Darkling Beetles and Hide Beetles (adults and larvae) Control in Bird and Poultry Facilities

First, remove birds. Use equipment designed for this type of application. Apply to structural sidewalls, posts, framing, top plates, into cracks and crevices, around insulation and on other structural components that might harbor beetles. Reapply application annually, after each grow-out or if facility is washed, sanitized and disinfected.

Dust applications: If birds are in contact with floor or litter: Apply dry product with a spreader directly to the floor or old litter surface at the rate of 1-2 lbs/100 ft² of floor area. Apply a band treatment along bird feeder lines. Reapply annually if needed or after each grow-out. If birds are caged and not in contact with the floor or litter: Apply dry product at the rate of 1½-2 lbs/100 ft² of surface area. For fly control, apply the dust to the surface of manure piles at the rate of 1½-2 lbs/100 ft² of surface area.

Supplemental Liquid applications: Add product at the rate of 1 lb/gallon of water. Apply solution on structural sidewalls, posts, framing, top plates, into cracks and crevices, around insulation and on other structural components that might harbor beetles at the rate of 4 gallons/100 ft² of surface area. For fly control, apply a liquid application to the surface of manure piles at the rate of 1½ lbs of product/gallon of water /150 ft² of surface area.

Wood Treatment Product Information

Nibor is a water soluble, inorganic borate salt with insecticidal and fungicidal properties that may be use on wood [and wood-foam composite structural components] and applied as a liquid solution, powder [or foam]. **Nibor** may be used as a preventative treatment (before signs of infestation) and for remedial treatment of infested wood. This product may also be used for pre-treatment of wood before or during the construction process.

Nibor kills, prevents and controls wood destroying insects and fungi such as, but not limited to, the following organisms:

Subterranean Termites (*Reticulitermes, Heterotermes, Coptotermes* (Formosan)), Drywood Termites (*Kalotermes, Incisitermes*), Dampwood Termites (*Zootermopsis*), Powderpost Beetles (*Lyctinae, Bostrichidae*), Deathwatch and Furniture Beetles (*Anobiidae*), Old House Borers, Longhorned Beetles (*Cerambycidae*), Carpenter Ants (*Camponotus*), Bark and Timber Beetles (*Scolytidae*), and Decay Fungi including white rot, brown rot (i.e., *Poria*) and wet rots.

Nibor is recommended for wood and cellulose materials in accordance with the specific treatment methods described herein and is effective for all interior and exterior wood (and wood-foam composite structural components) that will be protected from excessive rain and not in direct contact with the soil. Types of treatable materials include, but are not limited to, decks, fences, steps, sheds, barns and other outbuildings, ties, wool insulation, stumps, utility poles, timber, lumber, logs and plywood. Some etching of treated wood may occur from organisms before they die. Do not apply **Nibor** to wood or cellulose material that has been painted, varnished or sealed. For best results, apply **Nibor** to bare wood. Use soap and water to clean application equipment.

Note: Spraying water on some wood species can mobilize natural wood extractives, raise the grain and leave behind calcium or other deposits. Prior to treating large areas, treat a small area with **Nibor** solution to ensure that you are satisfied with the final aesthetics.

Preparation of Treatment Solutions [In Situ Treatment]

10% Liquid Solution: To prepare solution, add approximately 80% of the required volume of water to the mixing vessel. While stirring, gradually add 1.0 pound of **Nibor** for each gallon of treating solution required. Add remaining water to the solution and stir until the entire product has dissolved.

15% Liquid Solution: Prepare solution as above, but gradually add 1.5 lbs of **Nibor** for each gallon of treatment solution needed. [To prepare solution, add approximately 80% of the required volume of water to the mixing vessel. While stirring, gradually add 1.5 lbs of **Nibor** for each gallon of treating solution required. Add remaining water to the solution and stir until the entire product has dissolved.] Use this solution as soon as possible and do not store for an extended length of time.

15% Foam: Prepare a 15% liquid solution as described above and also add a surfactant-foaming agent. Generally 1-2 ounces [oz.] of a foaming agent, added to the 15% liquid solution, produces a dry foam with the desired expansion ratio of approximately 20 to 1 (20 gallons of foam per 1 gallon of liquid solution). The **Nibor** foam should be of a "dry" consistency that adheres to wood surfaces so that run-off is minimized. A "wet" foam may damage wallboard or other building components. Refer to the individual foam equipment manufacturer's manual and the surfactant's label for specific instructions.

Wash and rinse all equipment after each use.

Product Application Instructions

Liquid Application: Use a liquid solution to control wood destroying organisms, and to kill active infestations of termites, powderpost beetles and wood decay fungi. On wood with drier than normal moisture content, apply by brush or spray two applications of a 10% solution to wood surfaces. On wood with normal moisture content, apply by brush or spray one application of a 15% solution to wood surfaces. Application may also be made by drilling and then injecting the solution under pressure into sound wood or into the insect galleries of infested wood.

For remedial control of wood attacking organisms or for the protection of wood against future infestations, either two applications of a 10% liquid solution or one application of a 15% liquid solution are required.

Apply **Nibor** solutions by brush or spray at the rate of 5 gallons of liquid solution per 1000 square feet [ft2] of wood surface area. Thoroughly wet wood surface area. Application may also be made by drilling and then injecting the liquid solution under pressure into sound wood or until run-off is observed coming from entry/exit holes of infested wood.

Foam Application: Nibor may be applied as foam to wood surfaces or injected into wall voids or insect galleries. In wall voids, inject enough dry foam to contact wood surfaces of studs in the wall or the entire desired target area. Apply foam, where possible, to abutting wood surfaces and between wood joints. Apply the foam so that all

accessible wood surfaces are covered with foam. Foam can also be injected into insect galleries until run-off is observed.

Dust Application: Apply **Nibor** as a dust to kill and control wood destroying organisms, such as termite, and carpenter ants by drilling and injecting the powder into galleries, by dusting generously on wood surfaces, or by injecting or dusting into wall voids such as between studs, block voids, box sills, eaves, attics, soffits, etc. Apply to these areas at the rate of 0.5 ounce **oz.** (12-14 grams) per square foot 12-12. Dust can be injected or dusted into utility poles at a rate of 0.25 pound per cubic foot of area to be treated.

Wood Treatment during Construction for Prevention of Wood Destroying Organisms: Spray, foam or dust applications of Nibor may be made to wood after framing and roofing are in place and before insulation and drywall are installed. Apply Nibor liquid solutions to all accessible surfaces of bare wood at a rate of approximately 5 gallons per 1000 square feet [ft2" of wood surface area. Do not spray electrical components or other non-wood components. Treat end-cuts of wood by application methods listed above, or by dipping end-cuts for 1-5 minutes in a Nibor 10% liquid solution. Apply powder at the rate of 0.5 ounce [oz.] [(12-14 grams)] per square foot [ft2] to wall stud areas, box sills, roof eaves, attics and soffits.

Protect newly treated wood from excessive rain or moisture.

Dip-Diffusion Treatment

Preparation of Solutions: To prepare solutions described below, add water to the tank. Raise water temperature if desired and, with good agitation, gradually add the calculated amount of **Nibor**. Add any remaining water to the solution and agitate for an additional 10 minutes to ensure that all of the product has dissolved. In very cold weather, provide some heating or insulation to prevent solidification or freezing in the bottom of the tank. Cover the tank when not in use to prevent contamination and evaporation.

Suggested Conditions and Solution Strengths for Dip-Diffusion

	Suggested Conditions and Solution Strengths for Dip Direction		
	Timber/Lumber Thickness	Pounds of NiBor per Gallon of Solution	Diffusion Complete In
1	Up to 1 inch (2.5 cm)	1.40	2 to 4 weeks
	1 to 1.75 inches (2.5 to 4.0 cm)	1.80	4 to 6 weeks
	1.75 to 2.5 inches (4.0 to 6.5 cm)	2.50	4 to 6 weeks
	2.5 to 3 inches (6.5 to 7.5 cm)	2.80	6 to 8 weeks

Dip-Diffusion Method of Application: Dip freshly-cut lumber in a tank containing a liquid solution of **Nibor** for 2 to 5 minutes. After dipping, protect newly treated wood to prevent wash-off by rainfall. Diffusion of the wood preservative into the interior of the wood will start immediately and will require several weeks to thoroughly penetrate the lumber, depending on the species and thickness of wood. The dip-diffusion method of treatment can result in complete penetration throughout the cross-sectional area of treated lumber. The dip diffusion of lumber should result in a retention of 0.3 lb/ft³ (4.0 kg/m³).

Pressure Treatment

Pressure treatment of wood should result in a retention of 0.25 lb/ft³ to 0.3 lb/ft³ (4.02 kg/m³ to 4.8 kg/m³) **Nibor** in the assay zone specified in American Wood Preservers Association (AWPA) Standard C-31 for waterborne preservatives. The concentration of the solution must be adjusted to give the correct retention for wood species and size being treated; in general, solutions are in the range of 1-10% (0.1- 2.0% lb/gal.) w/v. Consult Standards C-1 and C-2 of the AWPA Book of Standards regarding treatment times, pressures and temperatures necessary for various wood species.

Cut clean wood to dimension and sticker before treating. If several species are being treated at once, choose the treatment schedule for the most difficult to treat species. If both sapwood and heartwood are included, use the schedule for heartwood to ensure adequate loading.

For Wool Insulation and Woolen Carpets/Materials Treatment Against Clothes Moths, Carpet Beetles and Fungi (Mold and Rot)

Use a 5% to 10% active solution (1/2 to 1 pound **Nibor** per gallon of water) in the final rinsing bowl of scouring and treat wet wool by immersion prior to drying and carding. Alternatively, **Nibor** may be applied by spray to dry wool products. Heated water improves wool fiber penetration. In both cases the minimum target retention on a dry weight basis is 1% to 5% boron to control fungi and insect infestation (beetles and moths).

For Annosus Root Disease Control

Nibor Solutions to Control Annosus Root Disease (*Heterobasidion annosum* (Fr.) Bref.) to Treat the Top of Freshly Cut Stumps in Forests and Plantings: Dilute Nibor to a 5% active solution by thoroughly mixing ½ pound Nibor per gallon of water. To prevent the solution from freezing during cold weather, substitute some or all of the water with the appropriate amount of dilute (not concentrate), propylene glycol-based antifreeze that is non-toxic to animals. Using a mechanical harvester, back-pack sprayer or hand-held sprayer, apply solution to the surfaces of freshly cut stumps immediately or within 3 days of felling. Apply to the point of wetness. A rate of one gallon solution per 200 square feet fr2 of stump surface area will treat 200 to 1,000 stumps, depending on stump size. Marker dye may be added to the solution as a visual treatment aid.

{For containers labeled for household/domestic use :}

Storage and Disposal

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

Pesticide Storage: Store in a dry place. Do not store where children or animals may gain access. **Container Management:** Non-refillable container; do not reuse or refill this container. **If empty:** Place container 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.

{For non-refillable containers labeled for occupational use:}

Storage and Disposal

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

Pesticide Storage: Store in a dry place. Do not store where children or animals may gain access. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Handling Management:** Non-refillable container; do not reuse or refill this container. Completely empty container by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment; then offer for recycling, if available; or dispose of in a sanitary landfill; or, if allowed by state and local authorities, by incineration.

{For non-rigid refillable containers labeled for occupational use:}

Storage and Disposal

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

Pesticide Storage: Store in a dry place. Do not store where children or animals may gain access. Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container Handling Management: Refillable container; refill this container with only Nibor. Do not reuse this container for any other purpose. Cleaning the container before refilling is the responsibility of the refiller. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Before final disposal, completely empty container by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment; then offer container for recycling, if available; or dispose of container in a sanitary landfill; or, if allowed by state and local authorities, by incineration.

{For rigid refillable containers labeled for occupational use:}

Storage and Disposal

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

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{Per PR Notice 2007-4 the batch code/lot number will appear on the label or container.}

Warranty Disclaimer

To the extent not prohibited by applicable law, Manufacturer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent not prohibited by applicable law, MANUFACTURER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

The directions for use of this product are believed to be adequate and must be carefully followed. It is impossible to eliminate all risks associated with use of this product. Lack of performance or other unintended consequences may result because of such factors as use of the product contrary to label instructions, abnormal conditions, the presence of other materials, climatic conditions or the manner of use/application, all of which are beyond the control of the Manufacturer. To the extent not prohibited by applicable law, the buyer/user assumes all such risks.

Limitation of Remedies

To the extent not prohibited by applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability or other legal theories) shall be limited to, at Manufacturer's election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

To the extent not prohibited by applicable law: a) Manufacturer shall not be liable for losses or damages resulting from handling or use of this product unless Manufacturer is promptly notified of such loss or damage in writing; and b) TO THE EXTENT NOT PROHIBITED BY APPLICABLE LAW, IN NO CASE SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OR LOSSES, INCLUDING WITHOUT LIMIT, HEALTH RELATED DAMAGES OR INJURIES.

The terms of this *Warranty Disclaimer* and *Limitation of Remedies* cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Manufacturer or the seller is authorized to vary or exceed the terms of this *Warranty Disclaimer* or *Limitation of Remedies* in any manner.

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



Nisus Corporation 100 Nisus Drive • Rockford, TN 37853 USA (800) 264-0870





- [] Denotes alternate/optional language {} Denotes language that will not appear on market labeling



Nibor™* Borate Insecticide and Fungicide

A preservative for protection and treatment of wood against fungal decay and wood destroying insects including termites

For the prevention and remedial control of wood** infesting organisms including: Termites, Drywood Termites, Wood Destroying Beetles, Fungi and Carpenter Ants **Also for Wood Foam Composite Structural Components

Active Ingredient:

Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)	98%
Other Ingredient+	2%
Total	100%
+Contains 2% H ₂ O – Absorbed Moisture	

*{Product Name} and the House Design trademark are registered trademarks of U.S. Borax Inc. and are used under license. Nisus is a registered trademark of Nisus Corporation.

EPA Reg. No. 64405-8

EPA Est. 64405-TN-1

Net Wt:

(1 lb. bag, 1 lb bottle, 1.5 lb bag, 5 lb pail, 5 lb bag, 15 lb pail, 25 lb pail, 50 lb bag, 250 lb drum, 250 lb mini sack, and 1500 lb super sack

Keep Out of Reach of Children CAUTION

First Aid

If Swallowed:	 Immediately call a poison control center or doctor for treatment advice. 	
	Have person sip a glass of water if able to swallow.	
	Do not induce vomiting unless told to do so by the poison control center or doctor.	
	Do not give anything by mouth to an unconscious person.	
If Inhaled:	Move person to fresh air.	
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.	
	Call a poison control center or doctor for further treatment advice.	
If in Eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.	
	Call a poison control center or doctor for further treatment advice.	
Have the produc	ave 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.

{Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.}

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

CAUTION: Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing dust. Thoroughly wash with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate; butyl, nitrile, neoprene and natural rubbers \geq 14 mils; polyethylene; polyvinyl chloride; and viton \geq 14 mils. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Applicators, mixers and other handlers must wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and protective eyewear. When applying this product in confined spaces, provide ventilation or an exhaust system; or use a NIOSH-approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C); or use a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G) or a NIOSH-approved respirator with any N, R, P or HE prefilter.

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.

{Product packaged in containers of 50 pounds or larger will bear the following Environmental Hazards statements:}

Environmental Hazards

This pesticide is toxic to fish and wildlife. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State water board or regional office of the EPA.

{Product packaged in containers less than 50 pounds will bear the following Environmental Hazards statements:}

Environmental Hazards

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

NOTICE

Read and understand the entire label before using.

Use only according to label directions.

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

DIRECTIONS FOR USE

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

Product Information

Nibor is a water soluble, inorganic borate salt with insecticidal and fungicidal properties effective against wood-destroying organisms including the target pests listed below. Apply **Nibor** as a liquid solution, powder or foam. **Nibor** is an effective treatment for wood (and wood-foam composite structural components) to kill and prevent infestations of decay fungi including white rot, brown rot (i.e., Poria) and wet rots. This product may be used for preventative treatment (before signs of infestation), for wood in existing structures and for remedial treatment of infested wood in existing structures. **Nibor** is also effective for the prevention and control of wood destroying insects such as, but not limited to, the following organisms:

Subterranean Termites (*Reticulitermes, Heterotermes*, *Coptotermes* (Formosan)), Drywood Termites (*Kalotermes, Incisitermes*), Dampwood Termites (*Zootermopsis*), Powderpost Beetles (*Lyctinae, Bostrichidae*), Deathwatch and Furniture Beetles (*Anobiidae*), Old House Borers, Longhorned Beetles (*Cerambycidae*), Carpenter Ants (*Camponotus*), Bark and Timber Beetles (*Scolytidae*)

Nibor is recommended for wood and cellulose material in accordance with the specific treatment methods described herein. **Nibor** is effective for all interior and exterior wood (and wood-foam composite structural components) that will be protected from excessive rain and not in direct contact with the soil. Types of wood include, but are not limited to, all types of lumber, logs and plywood. This product kills wood-destroying organisms. Some etching of treated wood may occur from organisms before they die. Do not apply **Nibor** to wood or cellulose material that has been painted, varnished or sealed. For best results, apply **Nibor** to bare wood. Use soap and water to clean application equipment.

Note: Spraying water on some wood species can mobilize natural wood extractives, raise the grain and leave behind calcium or other deposits. Prior to treating large areas, treat a small area with **Nibor** solution to ensure that you are satisfied with the final aesthetics.

Preparation of Treatment Solutions

10% Nibor Liquid Solution: To prepare solution, add approximately 80% of the required volume of water to the mixing vessel. While stirring, gradually add 1.0 pound of **Nibor** for each gallon of treating solution required. Add remaining water to the solution and stir until the entire product has dissolved.

15% Nibor Liquid Solution: Prepare solution as above, but gradually add 1.5 lbs of Nibor for each gallon of treatment solution needed. Use this solution as soon as possible and do not store for an extended length of time.15% Nibor Foam: Prepare a 15% liquid solution as described above and also add a surfactant-foaming agent. Generally 1-2 ounces [oz.] of a foaming agent, added to the 15% liquid solution, produces a dry foam with the desired expansion ratio of approximately 20 to 1 (20 gallons of foam per 1 gallon of liquid solution). The Nibor foam should be of a "dry" consistency that adheres to wood surfaces so that run-off is minimized. A "wet" foam may damage wallboard or other building components. Refer to the individual foam equipment manufacturer's manual and the surfactant's label for specific instructions.

Wash and rinse all equipment after each use.

Application Instructions

Nibor as a liquid solution: Nibor liquid applications may be made to wood structures including decks, fences, steps, sheds, barns and other outbuildings. Such structures must be protected from excess rain. On wood with drier than normal moisture content, apply by brush or spray two applications of a 10% solution to wood surfaces. On wood with normal moisture content, apply by brush or spray one application of a 15% solution to wood surfaces. Application may also be made by drilling and then injecting the solution under pressure into sound wood or into the

insect galleries of infested wood. **Nibor** may be applied as foam to wood surfaces or injected into wall voids or insect galleries.

Remedial and Preventative Treatment

Nibor Solutions for the Control of Wood Destroying Organisms and to Kill Active Infestations of Termites, Powderpost Beetles and Wood Fungi: For remedial control of wood attacking organisms or for the protection of wood against future infestations, two applications of a 10% liquid solution are required. One application of a 15% liquid solution may be used. Apply Nibor solutions by brush or spray at the rate of 5 gallons of liquid solution per 1000 square feet [ft²] of wood surface area. Thoroughly wet wood surface area. Application may also be made by drilling and then injecting the liquid solution under pressure into sound wood or until run-off is observed coming from entry/exit holes of infested wood.

Nibor Powder to Kill and Control Wood Destroying Organisms, Such as Termites and Carpenter Ants: Apply **Nibor** as is to wood members by drilling and injecting the powder into galleries or by dusting generously on wood surfaces. **Nibor** powder can also be injected or dusted into wall voids such as between studs, block voids, box sills, eaves, attics, soffits, etc. Apply **Nibor** powder to these areas at the rate of 0.5 ounce [oz.] [(12-14 grams)] per square foot [ft²].

Nibor Foam: In wall voids, inject enough dry foam to contact wood surfaces of studs in the wall or the entire desired target area. Apply foam, where possible, to abutting wood surfaces and between wood joints. Apply the foam so that all accessible wood surfaces are covered with foam. **Nibor** foam can also be injected into insect galleries until run-off is observed.

(For containers labeled for household/domestic use:)

Storage and Disposal

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

Pesticide Storage: Store in a dry place. Do not store where children or animals may gain access. **Container Management:** Non-refillable container; do not reuse or refill this container. **If empty:** Place container 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.

{For non-refillable containers labeled for occupational use:}

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{For non-rigid refillable containers labeled for occupational use:}

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Children can fall into bucket and drown.

Keep children away from bucket with even a small amount of liquid.

Niňos pueden caer adentro de el balde y ahogarse.

Mantenga los niños alejados de los baldes aunque solamente tengan un poco de líquido.



Nisus Corporation 100 Nisus Drive • Rockford, TN <u>USA</u> 37853 (800) 264-0870



{Marketing Claims}

For the prevention and remedial control of wood* infesting organisms including: Carpenter Ants, Decay Fungi, Drywood Termites, Termites and Wood Destroying Beetles

*Also for Wood Foam Composite Structural Components

For the Control and Prevention of General Pests

A wood preservative for protection and treatment of lumber [including railroad ties] against fungal decay and wood destroying insects including termites

For the Control and Prevention of Common Mildew and Fungus

For the Control of Carpet Beetles, Clothes Moths, Mold and Rot in Wool Insulation

For the Control of Annosus Root Disease (Heterobasidion annosum (Fr.) Bref.) in Freshly Cut Stumps

For the Control of Ants, Cockroaches, Crickets, Drain Flies, Silverfish, Fleas, Flies, Dust Mites, Lady Bugs, Darkling Beetles, and Hide Beetles.

For Both Interior & Exterior Use

- [] Denotes alternate/optional language
- {} Denotes language that will not appear on market labeling