

PM 03

64405-8

1-29-98

10/9



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

64405--8

JAN 29 1998

Term of Issuance: Conditional

NOTICE OF PESTICIDE:
 Registration
 Reregistration

Name of Pesticide Product: Nibor
Borate Insecticide
and Fungicide

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

NISUS Corporation
c/o RegWest Company
P.O. Box 2220
Greeley, CO 80632-2220

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c) (7) (A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c) (5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label changes:

a. Revise the EPA Registration Number to read, "EPA Reg. No. 64405-8".

3. Revise the Environmental Hazards Statements to read:

Nibor or Nibor solutions carelessly spilled or applied to cropland or growing plants, including trees and shrubs, may kill or seriously retard plant growth.

Signature of Approving Official:

Marion Johnson, Jr /PM/IB/RD

Date:

JAN 29 1998

2079

Cover nearby plants and soil to avoid possible contamination. Do not apply directly to water. 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.

4. Revise the Precautionary Statement to read:

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

5. Revise the Statements of Practical Treatment to read:

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

IF INHALED: Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.

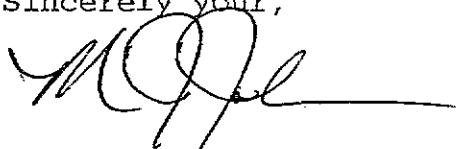
IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

3. Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Sincerely your,



Marion J. Johnson, Jr.
Product Manager 10
Insecticide Branch
Registration Division (7505c)

NIBOR™

BORATE INSECTICIDE AND FUNGICIDE

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

For the Control and Prevention of General Pests.

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

For the Control and Prevention of Common Mildew and Fungus.

ACTIVE INGREDIENT:

Disodium Octaborate Tetrahydrate (Na ₂ B ₈ O ₁₃ ·4H ₂ O)	98%
INERT INGREDIENTS *	2%

*Contains 2% H₂O - Absorbed Moisture

EPA Reg. No. 64405-I EPA Est. 64405-TN-1

**ACCEPTED
with COMMENTS
in EPA Letter Dated**

JAN 29 1988

NISUS CORPORATION
215 Dunavant Drive
Rockford, TN 37853

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.**

64405-8

**Keep Out of Reach of Children
CAUTION**

**PRECAUTIONARY STATEMENTS
Hazards To Humans & Domestic Animals**

CAUTION: Harmful if swallowed. May cause eye irritation. Avoid contact with eyes. Wash thoroughly after handling. Avoid inhalation of dust. Avoid contamination of food and feed. Do not leave container where children or animals may gain access.

Statement of Practical Treatment

If Swallowed: Give 1 or 2 glasses of water and seek medical attention or contact a poison control center.

If In Eyes: Flush with plenty of water. Get medical attention if irritation persists.

If On Skin: Remove contaminated clothing and wash skin with water.

If Inhaled: Remove person to fresh air.

In case of a medical emergency involving this product call (800) 424-9300 or your local poison control center.

Environmental Hazards

NIBOR or NIBOR solutions carelessly spilled or applied to cropland or growing plants, including trees and shrubs, may kill or seriously retard plant growth. Cover nearby plants and soil to avoid possible contamination. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

4079

NOTICE

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

Before buying or using this product, read **WARRANTY LIMITATIONS AND DISCLAIMER** statement found elsewhere on this label. If terms are unacceptable, return unopened package to seller for full refund of purchase price. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under **WARRANTY LIMITATIONS AND DISCLAIMER**.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

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

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 Disposal:** Paper or Plastic Bags: Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Plastic Containers: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL 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. This product can be used for preventative treatment (before signs of infestation), for wood in existing structures and for remedial treatment of infested wood in existing structures. This product can also be used for pre-treatment of wood before or during the construction process.

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 will kill wood-destroying organisms. Some etching of treated wood may occur from organisms before they die.

NIBOR should not be applied 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.

Target Organisms

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. 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 (*Kalotermites*, *Incisitermes*)
- Dampwood Termites (*Zootermopsis*)
- Powderpost Beetles (*Lyctidae*)
- "False" Powderpost Beetles (*Bostrichidae*)
- Deathwatch and Furniture Beetles (*anobiidae*)

Old House Borers, Longhorn Beetles (Cerambycidae)
Carpenter Ants (Camponotus)
Bark and Timber Beetles (Scolytidae)

Preparation of a Treatment Solution

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 pounds of NIBOR for each gallon of treatment solution needed. This solution should be used as soon as possible and not stored 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 of a foaming agent added to the 15% liquid solution will produce 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 could damage wall board or other building components. It is also recommended to 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

NIBOR as a liquid solution: Apply two applications of a 10% solution to wood surfaces by brush or spray. NIBOR liquid applications may be made to wood structures including decks, fences, steps, sheds, barns and other out-buildings.

NIBOR may be used as a liquid solution, a powder or a foam. Apply two applications of a 10% solution to wood surfaces by brush or spray. Apply one application of a 15% solution to wood surfaces by brush or spray. 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 a 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 Decay 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 normally 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 of wood surface area. Wood surface area should be thoroughly wet after application. 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 Power to Kill and Control Wood Destroying Organisms, Such as Termites and Carpenter Ants: NIBOR may be applied 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, soffets, etc. Apply NIBOR powder to these areas at the rate of 0.5 ounce (12-14 grams) per square foot.

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.

Old House Borers, Longhorn Beetles (Cerambycidae)
Carpenter Ants (Camponotus)
Bark and Timber Beetles (Scolytidae)

Preparation of a Treatment Solution

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 pounds of NIBOR for each gallon of treatment solution needed. This solution should be used as soon as possible and not stored 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 of a foaming agent added to the 15% liquid solution will produce 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 could damage wall board or other building components. It is also recommended to 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

NIBOR as a liquid solution: Apply two applications of a 10% solution to wood surfaces by brush or spray. NIBOR liquid applications may be made to wood structures including decks, fences, steps, sheds, barns and other out-buildings.

NIBOR may be used as a liquid solution, a powder or a foam. Apply two applications of a 10% solution to wood surfaces by brush or spray. Apply one application of a 15% solution to wood surfaces by brush or spray. 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 a 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 Decay 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 normally 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 of wood surface area. Wood surface area should be thoroughly wet after application. 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 Power to Kill and Control Wood Destroying Organisms, Such as Termites and Carpenter Ants: NIBOR may be applied 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, soffets, etc. Apply NIBOR powder to these areas at the rate of 0.5 ounce (12-14 grams) per square foot.

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.

Wood Treatment During Construction for Prevention of Wood Destroying Organisms: During Construction: Spray, foam or powder applications of NIBOR may be made to wood. Apply a NIBOR liquid solution to all accessible surfaces of bare wood at a rate of approximately 5 gallons per 1000 square feet of wood surface area. Application should be made after framing and roofing are in place and before insulation and dry wall are installed. Avoid spraying electrical components or other non-wood components. End-cuts of wood should also be treated by application methods listed above, or by dipping end-cuts for 1-5 minutes in a NIBOR 10% liquid solution. Powder applications of NIBOR should be made after framing and roofing are in place and before insulation and dry wall are installed. Apply powder at the rate of 0.5 ounce (12-14 grams) per square foot to wall stud areas, box sills, roof eaves, attics and soffets.

Protect newly treated wood from excessive rain or moisture.

GENERAL INSECT CONTROL

General Information

NIBOR may be used as a liquid crack, crevice, void and spot treatment for the control and prevention of general pests, such as ants, crickets, earwigs, roaches and silverfish. NIBOR may only be used as a crack and crevice treatment in food areas of food handling establishments, restaurants or other places where food is commercially prepared. Do not use in serving areas while food is exposed. Avoid contamination of feed and foodstuffs. Do not use in edible product areas. Applications of this product in the food areas of food handling establishments other than as a crack and crevice treatment are not permitted.

NIBOR may be used in homes, restaurants, markets, schools, warehouses, factories, offices, hotels, hospitals, nursing homes, garages, grocery stores, apartment buildings, new construction, industrial plants, theaters, ships, trains, trucks, yachts, mobile homes, buses, zoos, kennels, military bases, libraries and utilities. Apply NIBOR only in areas inaccessible to children and pets. Do not use in edible product areas of food handling establishments, restaurants or other areas where food is commercially prepared or processed. Do not use in serving areas while food is exposed. NIBOR may not be used for flea control.

NIBOR is a water soluble inorganic borate salt with insecticidal properties effective against general pests, including the target pests listed below. This product can be used as a remedial treatment to kill and control existing infestations or as a preventative treatment for possible future infestations of general pests such as, but not limited to, those listed below:

- Roaches (including German, Brown-banded, Smokey Brown, Brown, American, Australian and Oriental Roaches)
- Silverfish
- Earwigs
- Crickets (including House crickets, Field crickets and Camel Crickets)
- General Ants (including Argentine, Thief, Little Black, Pavement, Odorous House, Crazy and Ghost Ants)
- Carpenter Ants
- Boxelder Bugs
- Cluster Flies
- Centipedes and Millipedes

NIBOR Application as a Dust: NIBOR may be dusted into wall voids, cracks and crevices, moist areas, openings around pipes and sinks, under refrigerators, behind baseboards and storage shelves to kill and prevent infestations of ants, crickets, cockroaches, silverfish and other pest insects and arthropods. No powder should be visible after application. Any powder visible after application must be brushed into cracks and crevices or removed. Apply only in areas inaccessible to children and pets. Avoid contamination of feed and foodstuffs. Do not use in areas where food is exposed.

NIBOR Application as a Liquid: NIBOR 15% liquid solution may be applied as a crack and crevice, void and spot treatment to kill and control infestations of ants, crickets, cockroaches, earwigs and silverfish. Apply NIBOR 15% liquid solution into cracks and crevices, void areas, between elements of construction, between equipment and floors, openings leading to voids and hollow spaces in walls, equipment legs and bases and areas where insects hide. Care should be taken to avoid introducing the material into the air. NIBOR 15% liquid solution for general insect control may be applied as a spot treatment to outside areas of structures around windows, door frames and other areas where insect pests may enter. Product may leave a light residue on dark surfaces. Residual effects of NIBOR will last longer in areas protected from weather and elements.

NOTE: Do not apply NIBOR liquid solutions in conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

Directions for Applying NIBOR as a Mop Solution: Add 8 ounces of NIBOR to each gallon of rinse water. Apply to floor areas only for the supplemental control of pests including ants and cockroaches. Make only enough for each application. This is to be used as a supplemental treatment in conjunction with other pest management practices and may be reapplied as necessary. Any powder visible after application must be brushed into cracks and crevices or removed. Avoid contamination of feed and foodstuffs.

Directions for Applying NIBOR to Control Mildew and Fungus: NIBOR may be mixed at the rate of 8 ounces of powder to 1 gallon of water and applied to certain surfaces to kill and control mildew and fungus. Application should be in conjunction with moisture control in areas affected by mildew and fungus. Apply as a spot treatment to affected surfaces including baseboards and wall areas. **DO NOT APPLY NIBOR TO CARPET AREAS.** Reapply to affected areas as necessary.

DIP-DIFFUSION TREATMENT

Preparation of Solutions: To prepare solutions described below, water should be added to the tank to about 80% of the volume of solution required. Raise water temperature to the desired level and gradually add the calculated amount of NIBOR with good agitation. Add remaining water to the solution and agitate for an additional 10 minutes to insure that all of the product has dissolved. The temperature of the solution should be maintained during treatment. Upon cooling some borate may crystallize out of the solution, but will redissolve when the solution is heated for the next treatment session. In very cold weather, some heating or insulation should be provided to prevent solidification in the bottom of the tank. The tank should be covered when not in use to prevent contamination and evaporation.

SUGGESTED CONDITIONS AND SOLUTION STRENGTHS FOR DIP-DIFFUSION

LUMBER THICKNESS	POUNDS OF NIBOR PER GALLON OF SOLUTION	SOLUTION TEMPERATURE	DIFFUSION COMPLETE IN
Up to 1 inch (2.5 cm)	1.40	105° F (40° C)	2 to 4 weeks
1 to 1.75 inches (2.5 to 4.0 cm)	1.80	120°F (50°C)	4 to 6 weeks
1.75 to 2.5 inches (4.0 to 6.5 cm)	2.50	130° F (55°C)	4 to 6 weeks
2.5 to 3 inches (6.5 to 7.5 cm)	2.80	135° F (57°C)	6 to 8 weeks

9079

*Lumber over 3 inches (7.5 cm) in thickness or over 5 inches (12.5 cm) in width should be dipped twice 24 to 72 hours apart.

Dip-Diffusion Method of Application: Dip freshly-cut lumber in a tank containing a hot liquid solution of NIBOR for 2 to 5 minutes. After dipping, the newly treated wood should be stacked and stored under a tarpaulin or shed roof to slow the drying process and prevent wash-off by rainfall, thus improving penetration. 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.

PRESSURE TREATMENT

Pressure treatment of wood should result in a retention of 0.3 lb./sq.ft. (4.8 kg/m³) NIBOR in the assay zone specified in American Wood Preservers Association (AWPA) Standard C-2 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 1-2% (0.1-0.2 lb./gal.) w/v. Standards C-1 and C-2 of the AWPA Book of Standards should be consulted regarding treatment times, pressures and temperatures necessary for various species of wood.

Clean wood should be cut to dimension, dried to less than 25% moisture (as oven dry weight) and stickered before treating. If several species are being treated at once, the treatment schedule should be chosen for the most difficult to treat species. If both sapwood and heartwood are included, use the schedule for heartwood to ensure adequate loading.

WARRANTY LIMITATIONS AND DISCLAIMER

Because of varying conditions affecting the use and application, manufacturer warns buyer that these may impair or vary the results or effects of the use of this product. In any event, complete prevention of decay or insect infestation is not guaranteed. Neither the manufacturer nor seller shall be liable in respect to any injury or damage suffered by reason of the use of this product for a purpose not indicated by the label or when used contrary to the directions or instructions hereon nor with respect to breach of any warranty not expressly specified herein. Buyer accepts this material subject to these terms and assumes all risk of usage and handling except when used or handled in accordance with this label.