# NIBOR-D®

# Insecticide

**Nibor-D** is a versatile borate powder that can be used as a dust, applied liquid, foam or mop solution. It can be applied both indoors and outdoors as a crack, crevice, void and spot treatment as well as used in drains, sewers, attic insulation and many other locations.

Dust wall voids and attics, use it in a liquid formulation for general pests and as a drain foam and mop solution in commercial kitchens. Pest companies can get control in the toughest commercial accounts because Nibor-D turns food debris left behind due to poor sanitization into a borate bait that helps them achieve and maintain control.

- Borate-based broad spectrum insecticide.
- For both interior and exterior use.
- Use as a dust, liquid or foam application in many areas.
- No known insect resistance.









For the control and prevention of general pests such as crickets, cockroaches, silverfish, ants, fleas, lady bugs, drain flies, small flies, cluster flies, darkling beetles and earwigs.

#### For both interior and exterior use.

Use Nibor-D 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.

#### **ACTIVE INGREDIENT:**

Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)	98%
OTHER INGREDIENT*	2%
TOTAL	100%

EPA Reg. No. 64405-8 EPA Est. 64405-TN-1

# Keep Out of Reach of Children CAUTION

#### First Aid

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

## 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.

#### **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.

#### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate; butyl, nitrile, neoprene and natural rubbers ≥ 14 mils; polyethylene; polyvinyl chloride; and viton ≥ 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.

<sup>\*</sup>Contains 2% H<sub>2</sub>O Absorbed Moisture

#### **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.

#### 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.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# GENERAL INSECT CONTROL Product Information

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

#### Preparation of a 15% Nibor-D Liquid Solution

Measure approximately 80% of the required volume of water to the mixing vessel. While stirring, gradually add Nibor-D powder into water. For liquid sprays or foams, add 1.5 lbs (approximately 7.5 cups) of Nibor-D 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 (approximately 2.5 cups) of Nibor-D per gallon of water. Add remaining water to the mixing vessel and stir until Nibor-D has completely dissolved. Use this finished solution as soon as possible. Do not store for an extended length of time.

Nibor-D 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-D Foam Solution

To create a dry consistency foam, add a surfactant/foaming agent and a Nibor-D 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. 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-D 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 per 250 square feet of area.

**Floor Drains:** Apply 1-2 ounces 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 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 per 250 square feet.

**Attic Insulation:** Nibor-D 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.

**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-D 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-D 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.

Extraction or Steam Carpet Cleaning Machines: Add carpet cleaning detergent to the Nibor-D 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 ft<sup>2</sup> 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. Re-apply 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 ft $^2$  of surface area. For fly control, apply a liquid application to the surface of manure piles at the rate of  $1\frac{1}{2}$  lbs of product/gallon of water /150 ft $^2$  of surface area.

#### Wood Treatment Product Information

Nibor-D is a water soluble, inorganic borate salt with insecticidal and fungicidal properties that may be used on wood and applied as a liquid solution or powder. Nibor-D 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-D 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-D 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-D to wood or cellulose material that has been painted, varnished or sealed. For best results, apply Nibor-D 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-D 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-D 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-D 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% 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, 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-D 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-D solutions by brush or spray at the rate of 5 gallons of liquid solution per 1000 square feet 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-D 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-D as a dust to kill and control wood destroying organisms such as termites 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 (12-14 grams) per square foot. 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-D may be made to wood after framing and roofing are in place and before insulation and drywall are installed. Apply Nibor-D liquid solutions to all accessible surfaces of bare wood at a rate of approximately 5 gallons per 1000 square feet 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-D 10% liquid solution. 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 soffits.

Protect newly treated wood from excessive rain or moisture.

#### 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 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.

#### **Warranty Disclaimer**

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. 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:

- 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) 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.



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