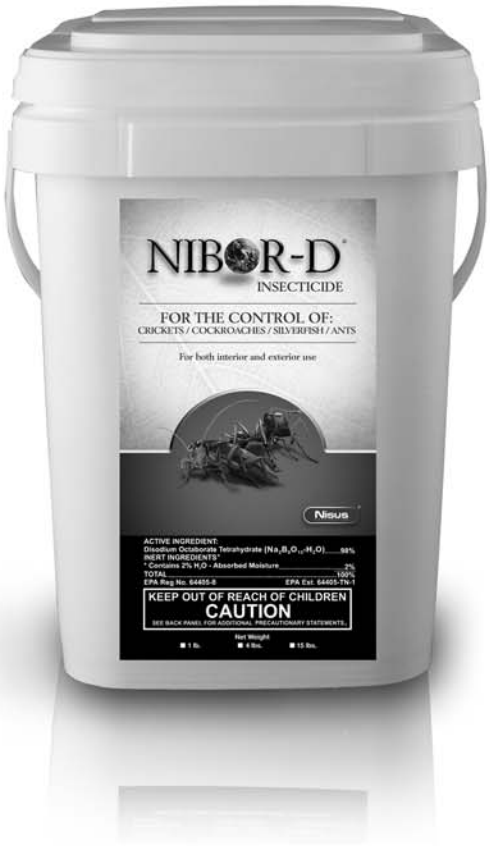
One word... Versatility.



Powerful pest & decay fungi control.

Nibor-D® is a borate powder used as a dust or liquid in crack and crevice applications. It effectively prevents and controls carpenter ants, crickets, cockroaches, silverfish, earwigs, boxelder bugs, cluster flies, centipedes, millipedes, ants, mildew and fungi.

- **Broad spectrum insecticide and fungicide.**
- **Use as a dust, liquid or mop solution.**
- **For both interior and exterior use.**
- **NO known resistance.**
- **Available in 1-lb. bottles and 15-lb. containers.**

Nisus Corporation • 100 Nisus Drive • Rockford, TN 37853
(800) 264-0870 • www.nisuscorp.com

Nisus CORPORATION
The World's Leader in Borate Technology

NiBor-D®
INSECTICIDE FUNGICIDE

For the Control of: Crickets, Cockroaches, Silverfish and Ants

For Both Interior and Exterior Use

Active Ingredient:

Disodium Octaborate Tetrahydrate ($Na_2B_8O_{13}•4H_20$)	98%
Other Ingredient*	2%
Total	100%

*Contains 2% H_20 Absorbed Moisture)

EPA Reg. No. 64405-8

EPA Est. 64405-TN-1

KEEP OUT OF REACH OF CHILDREN
CAUTION

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

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

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 no 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 product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 800-424-9300 for emergency medical treatment information.	

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 ***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. **Pesticide Storage:** Store in a dry place. Do not store where children or animals may gain access. **Disposal: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call you local solid waste agency or 800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

Preparation of a Treatment Solution

15% NIBOR-D Liquid Solution: To prepare solution, add approximately 80% of the required volume of water to the mixing vessel. While stirring, gradually add 1.5 pounds of **NIBOR-D** 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. Wash and rinse all equipment after each use.

GENERAL INSECT CONTROL

General Information

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

Use **NIBOR-D** 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-D** only in areas inaccessible to children and pets. Do not use **NIBOR-D** for flea control.

NIBOR-D is a water soluble inorganic borate salt with insecticidal properties effective against general pests, including the target pests listed below. Use 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**.

Application Instructions

NIBOR-D Application as a Dust: Dust **NIBOR-D** 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 insect pests and arthropods. No powder should be visible after application. Remove or brush any powder visible after application into cracks and crevices.

NIBOR-D Application as a Liquid: Apply **NIBOR-D** 15% liquid solution as a crack and crevice, void and spot treatment to kill and control infestations of ants, crickets, cockroaches, earwigs and silverfish. Apply **NIBOR-D** 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. Do not introduce the material into the air. Apply the **NIBOR-D** 15% liquid solution for general insect control 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-D** will last longer in areas protected from weather and elements.

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

Directions for Applying NIBOR-D as a Mop Solution: Add 8 ounces **NIBOR-D** 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. Remove or brush any powder visible after application into cracks and crevices. Do not contaminate feed and foodstuffs.

Directions for Applying NIBOR-D to Control Mildew and Fungus (Except in California): Mix **NIBOR-D** at the rate of 8 ounces of powder to 1 gallon of water. In areas affected by mildew and fungus, apply conventional to certain surfaces to kill and control mildew and fungus. In conjunction with conventional moisture control practices such as repairing leaking structural components or pipes, lowering interior humidity levels and, where possible, providing adequate ventilation. Apply as a spot treatment to affected surfaces including baseboards and wall areas. DO NOT APPLY **NIBOR-D** TO CARPET AREAS. Reapply as necessary.

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 or 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.

NISUS CORPORATION

100 Nisus Drive
Rockford, TN 37853
800-264-0870
www.nisuscorp.com

MADE IN THE U.S.A.

NiBor-D™

INSECTICIDE AND FUNGICIDE

Material Safety Data Sheet

Date of Issue: November 1999

SECTION I – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: NiBor-D™
Product use: Insecticide and Fungicide
Chemical formula: $Na_2B_8O_{13} \bullet 4H_2O$
Chemical name/synonyms: Disodium octaborate tetrahydrate
Chemical family: Inorganic borates
CAS registry number: 12280-03-4
EPA registration number: 64405-8
(Refer to Section 15 for TSCA/DSI, Chemical inventory listing)

MANUFACTURER:
Nisus Corporation
100 Nisus Drive
Rockford, TN 37853
(800) 264-0870
Fax: (865) 577-5825

HEALTH EMERGENCIES: Chemtrec® (800) 424-9300

SECTION II – HAZARD IDENTIFICATION AND PERSONAL PROTECTIVE EQUIPMENT INFORMATION

EMERGENCY OVERVIEW: NiBor-D is a white, odorless, powdered substance that is not flammable, combustible, or explosive and has low acute oral and dermal toxicity.
POTENTIAL ECOLOGICAL EFFECTS: Large amounts of NiBor-D can be harmful to plants and other species. Therefore, releases to the environment should be minimized.
POTENTIAL HEALTH EFFECTS: Routes of exposure: Inhalation is the most significant route of exposure in occupational and other settings. Dermal exposure is not usually a concern because NiBor-D is poorly absorbed through intact skin.
INHALATION: Occasional mild irritation effects to nose and throat may occur from inhalation of NiBor-D dust at levels greater than 10 mg/m3.
EYE CONTACT: NiBor-D is non-irritating to eyes in normal use.
SKIN CONTACT: NiBor-D does not cause irritation to intact skin.
INGESTION: Products containing NiBor-D are not intended for ingestion. NiBor-D has a low acute toxicity. Small amounts (e.g., a teaspoonful) swallowed accidentally are not likely to cause effects; swallowing amounts larger than that may cause gastrointestinal symptoms.
CANCER: NiBor-D is not a known carcinogen.
SIGNS AND SYMPTOMS OF EXPOSURE: Symptoms of accidental over-exposure to NiBor-D might include nausea, vomiting, and diarrhea, with delayed effects of skin redness and peeling.
PERSONAL PROTECTION: Eye protection, protective clothing, and waterproof gloves may be necessary under certain high exposure conditions. Otherwise, refer to label for actual regulatory personal protection requirements.
OCCUPATIONAL EXPOSURE LIMITS: Disodium octaborate tetrahydrate (NiBor-D) is considered to be a nuisance dust by OSHA, Cal OSHA, and ACGIH. The OSHA/PEL is 15mg/m^3 total dust and 5mg/m^3 respirable dust. The Cal OSHA/PEL and ACGIH/TLV are 10 mg/m^3. Use local exhaust or engineering controls to prevent exceeding exposure limits if possible.

SECTION III – FIRST AID MEASURES

Inhalation: If symptoms such as nose or throat irritation are observed, remove person to fresh air.
Eye contact: Use eye wash fountain or fresh water to cleanse eye. If irritation persists for more than 30 minutes, seek medical attention.
Skin Contact: No treatment necessary because non-irritating.
Ingestion: Swallowing small quantities (one teaspoon) will cause no harm to healthy adults. If larger amounts are swallowed, give two glasses of water to drink and seek medical attention.

SECTION IV – ACCIDENTAL RELEASE MEASURES

General: NiBor-D is a water-soluble white powder that may, at high concentrations, cause damage to trees or vegetation by root absorption.
Land spill: Vacuum, shovel or sweep up NiBor-D and place in containers for disposal in accordance with applicable local regulations. Avoid contamination of water bodies during cleanup and disposal.
Spillage into water: Where possible, remove any intact containers from the water. Advise local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns the boron value to its normal environmental background level.

NiBor-D is a non-hazardous waste when spilled or disposed of, as defined in the Resource Conservation and Recovery Act (RCRA) regulations (40 CFR 261).

SECTION V – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White, odorless, powder
Bulk density:	320 to 480 kg/m³
Vapor pressure:	Negligible @ 20°C
Solubility in water:	9.7% @ 20°C; 34.3% @ 50°C
Melting point:	815°C
pH @ 20°C:	8.3 (3.0% solution) 7.6 (10.0% solution)

SECTION VI – FIRE FIGHTING MEASURES AND HANDLING INSTRUCTIONS

FIRE FIGHTING MEASURES
General hazard: None, because NiBor-D is not flammable, combustible or explosive. The product is itself a flame retardant. Extinguishing media: Any extinguishing media may be used on nearby trees.
Flammability classification (29 CFR 1910.1200): Nonflammable solid.
General: NiBor-D is a stable product.
Hazardous decomposition: None.
HANDLING INSTRUCTIONS
General: No special handling precautions are required, but dry indoor storage is recommended. Good housekeeping procedures should be followed to minimize dust generation and accumulation.
Storage Conditions: Ambient air temperatures and a low moisture environment.
Incompatible materials and conditions to avoid: Reaction with strong reducing agents, such as metal hydrides or alkali metals, will generate hydrogen gas, which could create an explosive hazard.

SECTION VII – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY
Ingestion: Low acute oral toxicity; LD_{50} in rats is 2,550 mg/kg of body weight.
Skin/dermal: Low acute dermal toxicity; LD_{50} in rabbits is greater than 2,000 mg/kg of body weight. NiBor-D is poorly absorbed through intact skin.
Inhalation: Low acute inhalation toxicity; LD_{50} in rats is greater than 2.0 mg/L (or g/m³).
Skin Irritation: Non-irritant.

Eye Irritation: Draize test in rabbits produced mild eye irritation effects. Years of occupational exposure to NiBor-D indicates no adverse effects on human eye. Therefore NiBor-D is not considered to be a human eye irritant in normal industrial use.
Sensitization: NiBor-D is not a skin sensitizer.

SECTION VIII – ECOLOGICAL INFORMATION

ECOTOXICITY DATA
General: Boron (B) is the element in disodium octaborate tetrahydrate NiBor-D which is used by convention to report borate product ecological effects. To convert disodium octaborate tetrahydrate into the equivalent boron (B) content, multiply by 0.2096.
Phytotoxicity: Boron is an essential micronutrient for healthy growth of plants; however, it can be harmful to boron sensitive plants (e.g. grass and ornamentals) in high quantities.
Algal toxicity: Green algae, *Scenedesmus subspicatus*
96-hr EC10 =24 mg B/L
Invertebrate toxicity: Daphnids, *Daphnia magna straus tilt's*
24-hr EC50 = 242 mg B/L
Test substance: sodium tetraborate
Fish toxicity:
Seawater:
Dab, *Limanada limanda*
96-hr LD_{50} = 74 mg B/L
Freshwater:
Rainbow trout, *S. gairdneri* (embryo-larval stage)
24-day LD_{50} = 88 mg B/L
32-day LD_{50} = 54 mg B/L
Goldfish, *Carassius auratus* (embryo-larval stage)
7-day LD_{50} = 65 mg B/L
3-day LD_{50} = 71 mg B/L

SECTION IX – DISPOSAL CONSIDERATIONS

Disposal guidance: Consult state and local authorities for disposal guidelines.
RCRA (40 CFR 261): NiBor-D is not listed under any sections of the Federal Resource Conservation and Recovery Act (RCRA).

SECTION X – REGULATORY INFORMATION

OSHA/Cal OSHA: This MSDS document meets the requirements of both OSHA (29 CFR 1910.1200) and Cal OSHA (Title 8 CCR 5194 (g)) hazard communication standards. Refer to Section 8 for regulatory exposure limits. FIFRA: NiBor-D is registered with the EPA (EPA Reg. No. 64405-8), in accordance with Section 3 of FIFRA, as a pesticide product. **U.S. EPA TSCA Inventory** 12008-41-2
RCRA: Disodium octaborate tetrahydrate is not listed as a hazardous waste under any sections of the Resource Conservation and Recovery Act (RCRA) or regulations (40 CFR 261 *et seq*).
California Proposition 65: Disodium octaborate tetrahydrate (NiBor-D) is not listed on the Proposition 65 list of carcinogens or reproductive toxicants.
Superfund: CERCLA/SARA. Disodium octaborate tetrahydrate is not listed.
Safe Drinking Water Act (SDWA): Disodium octaborate tetrahydrate is not regulated under the SDWA, 42 USC 300g-1, 40 CFR 141 *et seq*. Consult state and local regulations for possible water quality advisories regarding boron compounds.
Clean Water Act (CWA) (Federal Water Pollution Control Act): 33 USC 1251 *et seq*.

- Disodium octaborate tetrahydrate (NiBor-D) is not itself a discharge covered by any water quality criteria of Section 304 of the CWA, 33 USC 1314.
- It is not on the Section 307 List of Priority Pollutants, 33 USC 1317, 40 CFR 129.
- It is not on the Section 311 List of Hazardous Substances, 33 USC 1321, 40 CFR 116.

Transportation Information: DOT hazardous classification – Disodium Octaborate Tetrahydrate (NiBor-D) is not regulated by the U.S. Department of Transportation.

For further information contact: NISUS Corporation Technical and Sales Support: 800-264-0870.

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