



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

September 17, 2019

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Luz Chan
Registration Manager
Drexel Chemical Company
P.O. Box 13327
Memphis, TN 38133-0327

Subject: Label Notification per PRN 98-10 – Update First Aid and Directions for Use
Product Name: LUM-BOR™
EPA Registration Number: 19713-286
Application Date: July 5, 2019
Decision Number: 553099

Dear Ms. Chan:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) 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 Srinivas Gowda by phone at 703-308-6354, or via email at gowda.srinivas@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Srinivas Gowda for".

Jacqueline Hardy
Product Manager – Team 34
Regulatory Management Branch II
Antimicrobials Division (7510P)



LUM-BOR™
Insecticide / Fungicide

For the preservation, protection and preventative treatment of wood* against the decay fungi and wood-destroying insects and for remedial control of such pests in infested wood.

*Also for wood-foam composite structural components.

ACTIVE INGREDIENT:
Disodium Octaborate Tetrahydrate (Na₂B₈O₁₃-4H₂O) 98.0%

OTHER INGREDIENTS: 2.0%

TOTAL: 100.0%

(Product contains 2% H₂O-absorbed moisture.)

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See FIRST AID Below

[See Side (Back) Panel for FIRST AID]

[See Attached Booklet for Complete Directions for Use]

NOTIFICATION

19713-286

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:

09/17/2019

EPA Reg. No. 19713-286
EPA Est. No. 19713-XX-XXX

Net Content: _____ Lbs. (_____ Kg)

FIRST AID
<p>IF SWALLOWED:</p> <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious or convulsing person.
<p>IF IN EYES:</p> <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.</p>

Manufactured By:



PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Waterproof gloves, eye protection, protective clothing (e.g., long-sleeved shirt and shoes) and a dust/mist filtering respirator (MSHA/NIOSH approval prefix number TC-21C) or a NIOSH approved respirator with any R, P or HE filter when utilizing this product or solution. Refer to MSDA for specific information. (NOTE: California only)

USER SAFETY

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and wildlife. This product, carelessly spilled or applied to cropland or growing plants, including, trees and shrubs, may kill or seriously retard plant growth. Do not contaminate water by cleaning of equipment or disposal of wastes. 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.

Wood treatment facilities must take steps to prevent runoff of the product into the waterway. Treated material stored outdoors within 100 feet of a pond, lake, stream, or river must be covered, surrounded by a containment berm, or otherwise protected to prevent surface water runoff. The containment berm must be of sufficient height to prevent runoff during heavy rainfall events.

USE INFORMATION

LUM-BOR is a water-soluble inorganic borate salt with insecticidal and fungicidal properties effective against wood-destroying organisms, including the listed target pests. This product can be used for remedial treatment of infested wood, for preventative treatment (before signs of infestations) for wood in existing structures or for pre-treatment of wood during construction.

This product is recommended for wood and cellulose materials in accordance with the specific treatment methods described herein. This product is effective for all interior and exterior wood (and wood-foam composite structural components) that will be protected from excessive rain not in direct contact with soil. Types of wood include, but are not limited to, all types of lumber, logs and plywood. This product is toxic to wood-destroying insects, but surface etching of treated wood by target organisms may occur.

DIRECTIONS FOR USE

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

RESISTANCE MANAGEMENT

DISODIUM OCTABORATE TETRAHYDRATE	GROUP	8D	INSECTICIDE
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For resistance management, this product contains a Group 8D insecticide. Any insect population may contain individuals naturally resistant to this product and other Group 8D insecticides. The resistant individuals may dominate the insect/mite population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of this product or other Group 8D insecticides within a growing season or among growing seasons with different groups that control the same pests. Use tank-mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Drexel Chemical Company's representatives at (901) 774-4370.

RESPIRATOR FIT TESTING, MEDICAL QUALIFICATION AND TRAINING

Using a program that conforms to OSHA's requirements (see 29 CFR Part 1910.134), employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked,
- Trained, and
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (such as a heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, such as a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change.
- Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements.

TARGET ORGANISMS

This product is effective for treatment of wood (and wood-foam composite structural components) against decay fungi, including brown (i.e., *Poria*), white and wet rots and wood boring insects such as, but not limited to the following Termites, Beetles and Carpenter ants:

Subterranean Termites

Reticulitermes, Heterotermes, Coptotermes (Formosan)

Drywood Termites

Kaloterms, Incisitermes

Dampwood Termites

Zootermopsis

Powder-Post Beetles

Lyctidae

“False” Powder-Post Beetles

Bostrichidae

Furniture and Deathwatch Beetles

Anobiidae

Old House Borers, Longhorn Beetles

Cerambycidae

Ambrosia Beetles

Scolytidae

USE RESTRICTIONS

- In Alabama, this product may ONLY be used as supplementary treatment for control of subterranean termites. Any other use of this product for subterranean termite control work is prohibited in Alabama.
- DO NOT use as a stand-alone preventive treatment for new construction in Florida.

PREPARATION OF TREATMENT SOLUTION

- **10% Aqueous Solution:** To prepare solution, water should be added to the tank to about 80% of the final volume of solution required. While agitating, add 1 pound of this product gradually for each gallon of treating solution required. The remaining water is then added and the solution is agitated until the product is dissolved.
- **15% Aqueous Solution:** Prepare solution as above, but gradually add 1.5 pounds of this product for each gallon of treating solution that is required. NOTE: This concentrated solution should be used immediately and should not be stored. Equipment should be rinsed and cleaned after use.
- **15% Foam:** Prepare 15% aqueous solution as listed above and add surfactant/foaming agent. Typically 1 to 2 ounces of foaming agent added to the 15% aqueous solution will produce a dry foam with the desired expansion ratios of approximately 20 to 1 (approximately 20 gallons of foam per 1 gallon of aqueous solution). This foam should be of a consistency that adheres to wood surfaces so that runoff is minimized. Since each foam machine can produce different foams, refer to the equipment manufacturer manuals and the surfactant's label for specific instructions.

APPLICATION

This product may be used as a solution, powder or foam. Two applications of 10% solution or one application of 15% solution can typically be applied to wood surfaces by brush or spray. Application of the solution may also be made by drilling and then injecting under pressure into sound wood or the galleries of infested wood. As a foam, this product may be applied directly to wood surfaces or injected into insect galleries or wall voids.

REMEDIAL AND PREVENTATIVE TREATMENT

Solutions: For remedial control of organisms attacking wood or for protection of wood against future infestations, 2 applications of 10% aqueous solution are normally required. Alternatively, apply 1 application of the 15% aqueous solution. Apply solutions of this product by brush or spray until wood surface is thoroughly wet at a rate of approximately 5 gallons per 1,000 square feet of wood surface area. Application may also be made by drilling and then injecting the solution under pressure into sound wood or until runoff is observed from entry/exit holes of infested wood.

Powder: Alternatively, apply this product to wood members by drill and injection into galleries or dust generously on wood surfaces. This product can also be injected into wall voids such as between studs, block voids, box sill, eaves, attics, soffits, etc. Apply powder at a rate of approximately 0.5 ounce (12 to 14 grams) per square foot.

For treatments in poultry houses / industrial / commercial / structural buildings: Do not apply with pressurized application methods except for use with crack and crevice, spot or void treatments.

Foam: Apply foam so that all accessible wood surfaces are covered with foam. Where possible, place foam between wood joints or abutting wood surfaces. In wall voids, inject enough foam to contact wood surfaces of studs in the wall or the target area desired. Foam can be injected into galleries until runoff is observed from kick holes or entry/exit holes.

PRE-TREATMENT OF WOOD

Spray, foam or powder/dust applications of this product may also be made to wood during construction. Apply solution to all accessible surfaces of bare wood at a rate of approximately 5 gallons per 1,000 square feet of wood surface area. Application should be performed after framing and roofing are in place and before insulation and dry wall are installed. Avoid spraying electrical components. Protect treated wood from excessive rain. End-cuts of wood may also be treated by the application methods listed above or by a 1 to 5 minute dipping in this product's solution.

Do not use as a stand-alone preventive treatment for new construction in Florida.

FOR DIP-DIFFUSION, PRESSURE AND WOOD TREATMENT USE

Follow the label specified treatment methods to ensure adequate chemical loadings in the wood.

DIP DIFFUSION TREATMENT

This method of treatment can result in complete penetration throughout the whole cross-sectional area of the treated lumber.

Preparation of Solution:

1. Add water to the tank to about 80% of the required solution.
2. Raise the temperature to the desired level and gradually add the calculated amount of this product with agitation.
3. Add the remaining water. Agitate the solution for an additional 10 minutes to ensure complete dissolution of this product.
4. Maintain the temperature of the solution during treatment.

Note: Upon cooling, some borate may crystallize out of the solution, but these will re-dissolve when solution is heated for the next treatment season. In very cold weather, some heating or insulation should be provided to prevent solidification at the bottom of the tank. The tank should be covered when not in use to prevent evaporation and contamination of the water.

SUGGESTED CONDITIONS AND STRENGTH OF SOLUTION

Lumber Diffusion Thickness		Pounds of Solution of This Product For 100 Gals. Solution	Temperature		Duration (Weeks)
In Inches (in)	In Centimeter (cm)		°F	°C	
Up to 1	Up to 2.5	140	105	40	2 to 4
1 to 1.75	2.5 to 4	180	120	50	4 to 6
1.75 to 2.5	4 to 6.5	250	130	55	4 to 6
2.5 to 3*	6.5 to 7.5	280	135	57	6 to 8

* 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.

Application Method:

Dip freshly cut lumber in a tank containing hot aqueous solution of this product for 2 to 5 minutes. After dipping, stack and store the newly treated wood 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 wood interior will start immediately and will require several weeks to thoroughly penetrate the lumber depending on the species and wood thickness.

PRESSURE TREATMENT

This treatment must rigidly adhere to the current specifications of this product and/or those of the American Wood Preserver's Association (AWPA) (e.g., U1-17).

WOOD TREATMENT

Wood Treatment During Construction: Apply 10 to 25% solution to runoff on all accessible interior and exterior wood surfaces as a minimum treatment to the bottom 24 inches up from foundation or ground at the rate of approximately 5 gallons per 1,000 square feet of wood surface area. Apply after framing and roofing are in place, before insulation and dry wall installed. Treatment may also be made on the whole house.

Treatment of Crawl Spaces and Basements: Apply 10 to 25% solution to runoff on all exposed and/or accessible wood. Where one wood side is exposed, treat twice. Allow to dry between treatments.

Treatment to Wood-Foam Composite Structural Components: Apply 10% solution on all sides to runoff.

Note: One quart or 32 ounce container loose packed is equal to 1 pound.

GENERAL INSECT CONTROL

This product may also be used as a crack and crevice and void treatment for general insect control such as Ants, Crickets, Earwigs, Roaches and Silverfish. This product may not be used for Flea control. The 15% aqueous solution may be used as a crack and crevice treatment only.

Dust this product into wall voids and hiding places such as cracks and crevices, moist areas, openings around pipes and sinks, under refrigerators, behind baseboards, coffee makers, meter boxes and manholes. No powder should be visible in living areas 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 serving areas when food is exposed.

Application of this powder or 15% aqueous solution is limited to crack and crevice treatment only in food areas of food handling establishments. Apply this between equipment and floors, openings leading to voids and hollow spaces in walls, and equipment legs and bases where insects hide. Care should be taken to avoid depositing the product into exposed surfaces or introducing the material into the air. Avoid contamination of food or food processing surfaces.

APPLICATIONS OF THIS PRODUCT IN THE FOOD AREAS OF FOOD-HANDLING ESTABLISHMENTS OTHER THAN AS A CRACK AND CREVICE TREATMENT, ARE NOT PERMITTED.

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: To avoid waste, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by State or local governments or by industry).

CONTAINER DISPOSAL:

Nonrefillable Container (flexible-bag-all weights): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically directed, and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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