

# CELLU-TREAT<sup>®</sup>

## LIQUID 50

**For Protection and Preventative Treatment of Wood Against Termites, Remedial Control of Such Pests in Infested Wood, Pressure Treatment and Dip-Diffusion Treatment.**

### Active Ingredient:

Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4).....	50%
<b>Other Ingredient*</b> .....	<u>50%</u>
<b>Total</b> .....	100%

**EPA Reg. No. 64405-11**  
**EPA Est. 64405-TN-1**

### Non-Restricted Use Preservative

## KEEP OUT OF REACH OF CHILDREN

# CAUTION

See First Aid and additional Precautionary Statements

FIRST AID	
<b>If Swallowed:</b>	<ul style="list-style-type: none"> <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>
<b>If In Eyes:</b>	<ul style="list-style-type: none"> <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>
<b>If on Skin or Clothing:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Immediately rinse skin with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If Inhaled:</b>	<ul style="list-style-type: none"> <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>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

**CAUTION:** Harmful if swallowed. Avoid contact with eyes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### Personal Protective Equipment

Applicators and other handlers must wear a long-sleeved shirt and long pants, socks, water-resistant boots, chemical-resistant gloves, and chemical-resistant protective eye-wear. When applying this product in confined spaces such as crawl spaces and attics, a ventilation exhaust system is recommended. Clean spills and over-spray with a clean damp cloth or use an absorbent. Dispose of spill as required by state guidelines and laws.

#### Environmental Hazards

Wood treatment facilities must take steps to prevent runoff of the product into the water-way. 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 a sufficient height to prevent runoff during heavy rainfall events.

This pesticide is toxic to fish and wildlife. Do not apply directly to water, to intertidal 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. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Use of this product for the control of bed bugs is prohibited.

Applications to carpets are prohibited.

For residential treatment. Use of this product does not substitute for mechanical alteration, soil treatment or foundation treatment, but is a supplement that is used as a preventative or remedial treatment to protect treated wood only.

#### 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**.

#### Use Restrictions

- Do not use in edible product areas of food processing plants or on countertops and other surfaces where food is prepared. Do not use in serving areas where food is exposed. Do not contaminate feed, water or food.
- Do not spray electrical components.
- This product does not enhance or provide structural integrity to treated wood.
- Do not apply Cellutreat Liquid DOT 50 to the surface of wood or cellulose materials that have been painted, varnished or sealed.
- This product is not for use on trees being grown for sale or other commercial use, or for commercial seed production, or for the production of timber or wood products, or for research purposes.

#### Phytotoxicity

This product may be phytotoxic to plants. When treating around the exterior of structures, cover and protect shrubs and other plants that may be potentially exposed to this product, when applied in accordance with the label directions.

#### Product Information

This product is a liquid concentrate that contains a water-soluble inorganic borate salt with termiticidal, insecticidal and fungicidal properties. This product can be used for remedial treatment of infested wood, for preventative treatment of wood in existing structures (before signs of infestations), for pre-treatment of wood during construction and for the pressure treatment or dip-diffusion of lumber and timber. This product is effective for interior wood, 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, ties, wool insulation, stumps, utility poles, timber, lumber, logs and plywood.

At the end of the primary service life, wood treated with this material is encouraged for secondary use including energy re-capture. It may be used as fuel as a non-hazardous secondary material in an appropriate permitted state facility.

#### Target Organisms

This product is effective for treatment of wood, cellulosic materials, wool and foam composite structural components against wood-infesting insects, including the following:

- Subterranean Termites** – *Reticulitermes*, *Heterotermes*, *Coptotermes* (Formosan)
- Dampwood Termites** – *Zootermopsis*

- Drywood Termites** (*Kaloterms*, *Incisitermes*)
- Powderpost Beetles** (*Lyctinae*, *Bostrichidae*, *Anobiidae*)
- Old House Borers, Longhorned Beetles** (*Cerambycidae*), **Bark and Timber Beetles** (*Scolytidae*)
- Carpenter Ants** (*Camponotus*)
- Decay Fungi** – white rot, brown rot (i.e., *Poria*), including dry rot and wet rot
- Clothes Moths • Carpet Beetles**
- Annosus Root Disease** (*Heterobasidium annosum* (Fr.) Bref.)

#### Preparation of Treatment Solution

##### To make a 30% (w/w) Cellutreat Liquid DOT 50 Solution:

This product must be diluted with a 1:3 ratio (Cellutreat Liquid DOT 50: water) to make a 30% aqueous solution (w/w) or 25% (v/v). A 30% aqueous solution (w/w) of Cellutreat Liquid DOT 50 contains 15% disodium octaborate tetrahydrate. Some surface etching of treated wood may occur before the target organisms die. This product does not enhance or provide structural integrity to treated wood.

- Determine the number of square feet of wood to be treated and divide by 200 sq. ft./gal.
- Use the table below to determine the volume of Cellutreat Liquid DOT 50 needed and the rinse volumes to be used.
- Empty the contents of the container(s) into an appropriately sized mixing vessel.
- Triple rinse the product container with the chosen amounts of rinse water from the table. Shake well to loosen and dissolve any residual product material and add to the mixing vessel. Use of hot water will hasten the dissolution process.
- Mix the contents of the mixing vessel using an electric drill until the product is dissolved (warm water) or uniformly dispersed (cold water)

Summary of Mixing Instructions			
Volume of 15% DOT Solution (or 30% w/w Cellutreat Liquid DOT 50)	1 gal. solution (200 sq. ft.)	2 gal. solution (400 sq. ft.)	4 gal. solution (800 sq. ft.)
Cellutreat Liquid DOT 50 contents	2.7 lbs., 32 fl. oz.	5.4 lbs., 64 fl. oz.	10.8 lbs., 1 gal.
Volume of each of 3 rinses	32 fl. oz. (1/4 gal)	64 fl. oz. (1/2 gal)	128 fl. oz. (1 gal)

##### To make a 30% (w/w) Cellutreat Liquid DOT 50 Foam:

- Prepare a 15% liquid solution as described above
- Add a surfactant-foaming agent. Generally 1-2 ounces of a foaming agent per gallon 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 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.

Continued on next page.

**Net Contents: 50 gal.**



### Product Application Instructions

Application may be made by spray, foam or dip on bare wood, or by drill/injection or pressure treatment into wood or insect galleries. Protect treated wood from excessive rain.

Do not apply Cellutreat Liquid DOT 50 to wood or cellulose material that has been painted, varnished or sealed. 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 Cellutreat Liquid DOT 50 solution to ensure that you are satisfied with the final aesthetics.

Avoid spraying electrical components. Be sure electricity is turned off until solution is completely dry. Wash and rinse all equipment after each use. Solutions of this product are compatible with stainless steel, brass and all plastic components of spray equipment.

### Preventative or Remedial Treatment Methods

**Brush or Spray:** Apply a 30% aqueous solution (w/w) of this product to all accessible bare wood surfaces during construction or as a remedial treatment at a rate of approximately 5 gallons per 1000 square feet. For adequate penetration, treatment should be conducted a second time after surface has dried.

Treatment should include all wood surfaces in the crawl space, slab, basement, attic and void constructions, including all sills, plates, floor joists, piers, girders, sub-floors and wood exposed to vertical access from the soil. For treating infested wood thicker than one inch, you must inject the product solution into the wood in addition to spraying. Longer injection times will give better penetration.

*Estimating amounts needed for brush/spray applications:*

Approximately 1 gallon of Cellutreat Liquid DOT 50 solution will be needed to treat every 200 sq. ft. of wood surface area. A piece of wood that is 10 feet long and 6x6 inches wide will have 5 sq. ft. of wood surface area (10 ft. x 0.5 ft = 5 ft<sup>2</sup>) per side. If you spray all four sides once, the total square footage would be 20 ft<sup>2</sup>, requiring 0.1 gallon of solution.

When calculating square footage of wood surface area in a crawl space or basement, you have to consider all the wood. First, determine the square footage of the crawl area by multiplying the length by the width; i.e., a 20 ft x 40 ft crawl space is 800 sq ft. Multiply this by 2.5 and the result is an approximation of the total square footage of wood surface area for all the wood in the crawl space. Therefore, a 20 ft. x 40 ft. crawl area would be 2000 sq. ft. of treatable wood surface area and would require 10 gallons of product solution for one application or 2.5 gallons of concentrated Cellutreat Liquid DOT 50 30% (w/w).

In estimating the amount for a preventative treatment, there are many sections to consider: attics, interior walls, exterior walls and flooring. Obtain the square footage for the living area and the crawl space or basement of the structure and multiply the total square footage by 9. For example, the structure to be treated will be 2000 sq. ft. and have a 20 ft. x 40 ft. crawl space. Wood surface area is 2000 multiplied by 9, equaling 18,000 sq. ft. Add the 2000 sq. ft. for the crawl space to get 20,000 sq. ft. of wood surface to be treated. This is 100 gallons of product solution per application or 2.5 gallons of concentrated Cellutreat Liquid DOT 50 30% (w/w).

**Drill and Inject:** Drill the holes through the widest dimension available without drilling through the entire beam. If the widest surface is not accessible, holes can be drilled in the narrower surface. Leave about 3/4 inch undrilled.

Arrange injection holes (1/8 inch dia.) in a diamond pattern in the area of suspected infestation. Drill one hole every 12 to 16 inches along the grain and every 4 to 6 inches across the grain. When possible, the wood should be treated one diamond pattern beyond the immediate area of visible infestation. If the diamond pattern cannot be used, drill holes 8-10 inches apart. All holes should be no deeper than the injection tip. Press and hold the injection tip firmly into each hole and inject solution until runoff is observed from other holes, galleries, etc. When injecting solid wood, maintain the injection pressure for 15 to 60 seconds at each hole. Release the trigger, wait briefly and withdraw the injection tip. Excess solution can be absorbed with paper towels and collected for disposal.

**Drill and Treat: For railroad ties or utility poles prior to pressure treating or in use.** To achieve a 0.25 lb/ft<sup>3</sup> DOT retention (or applicable standard) to wood members including railroad ties with pre-drilled holes: Apply this product full strength directly into pre-drilled holes for subsequent diffusion throughout the wood. Plug holes after application with BTX Plugs.

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

**End-Cut Treatment:** Pressure treated lumber end-cuts should be treated at the construction site because the wood preservatives do not entirely penetrate some wood. Generously spray or brush the end-cuts over a plastic drop cloth to collect any runoff. Alternatively, dip each end-cut for about 5 minutes.

### Pressure Treatment of Wood

**Preparation of Solutions:** First, add water to the tank. Raise the water's temperature, if desired, and gradually add the calculated amount of Cellutreat Liquid DOT 50 with good agitation. Add container rinsate (if applicable) and agitate for an additional 10 minutes to insure that the product has dissolved. In very cold weather, some heating or insulation should be provided to prevent solidification in the bottom of the tank and agitation should be continuous. Cover the tank when not in use for long periods to prevent contamination, evaporation or freezing of solution.

**Method of Application:** Pressure treatment of wood should result in a retention of 0.25 lb/ft<sup>3</sup> (4.0 kg/m<sup>3</sup>) DOT (equiv.) in the assay zone specified in American Wood Protection Association (AWPA) standard C-31 for waterborne preservatives or 0.3% DOT if not preventing subterranean termites. The concentration of the solution must be adjusted to give the correct retention for wood species and size being treated; in general, solutions are in the range of 1-10% DOT (equiv.) (0.083-1.66 lb/gal) w/v. Standards C-1 and C-2 of the AWPA should be consulted regarding treatment times, pressures and temperatures necessary for various species of wood.

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

### Dip-Diffusion Treatment

**Preparation of Solutions:** First, water should be added to the tank. Raise the water's temperature if desired, and gradually add the calculated amount of Cellutreat Liquid DOT 50 with good agitation. Add container rinsate (if applicable) and agitate for an additional 10 minutes to ensure that the product has dissolved. In very cold weather, some heating or insulation should be provided to prevent solidification in the bottom of the tank and agitation should be continuous. Cover the tank when not in use for long periods to prevent contamination, evaporation or freezing of solution.

Conditions and Solution Strengths for Dip-Diffusion					
Lumber Thickness	Pounds of Cellutreat Liquid DOT 50 per Gallon of Water	Gallons of Cellutreat Liquid DOT 50	Pounds of DOT (equiv.)	DOT (equiv.) Solution Concentrate	Time of Diffusion
Up to 1 inch (2.5 cm)	4.0	0.40	2.0	16.2%	2 to 4 weeks
1 to 1.75 in. (2.5 to 4.0 cm)	6.0	0.60	3.0	21.0%	4 to 6 weeks
1.75 to 2.5 in. (4.0 to 6.5 cm)	12.0	1.2	6.0	29.6%	4 to 6 weeks
2.5 to 3 in. (6.5 to 7.5 cm)	15.0	1.5	7.5	32.3%	6 to 8 weeks

If heated solution is used, agitate during cooling to prevent solidification. Adjust numbers accordingly to achieve retentions other than those listed in this table.

**Method of Application:** Dip freshly cut lumber in a tank containing an aqueous solution (at ambient temperature) of Cellutreat Liquid DOT 50 for 2 to 5 minutes. After dipping, the newly treated wood should be stacked and stored under a tarpaulin, roof or cover to prevent wash-off by rainfall. Diffusion into the interior of the wood will start immediately but will require several weeks (depending on species and thickness of wood) to thoroughly penetrate the lumber. The dip-diffusion of lumber should result in a retention of 0.25 lb/ft<sup>3</sup> (4.0 kg/m<sup>3</sup>) DOT or 0.33% if not preventing termites. Use a 10% retention to achieve flame retardancy.

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

Use a 5% to 10% active solution (1-2 pounds Cellutreat Liquid DOT 50 per gallon of water) in the final rinsing bowl of scouring and treat wet wool by immersion prior to drying and carding. Alternatively, this product may be applied by spray to dry wool products. Heated water improves wool fiber penetration. In both cases the minimum target retention on a dry weight basis is 1% to 5% boron (0.33% DOT) to control fungi and insect infestation (beetles and moths).

### For Annosus Root Disease Control (*Heterobasidion annosum* (Fr.) Bref.)

To treat the top of freshly cut stumps in forests and plantings dilute Cellutreat Liquid DOT 50 to a 5% active solution by thoroughly mixing 1 pound of this product per gallon of water. To prevent the solution from freezing during cold weather, substitute some or all of the water with the appropriate amount of dilute (not concentrate) propylene glycol-based antifreeze. Using a mechanical harvester, backpack sprayer or hand-held sprayer, apply solution to the surfaces of freshly cut stumps immediately or within 3 days of felling. Apply to the point of wetness. A rate of one gallon solution per 200 square feet of stump surface area will treat 200 to 1,000 stumps, depending on stump size. Marker dye may be added to the solution as a visual treatment aid.

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a cool, dry (preferably locked) storage area inaccessible to children and pets. Do not freeze. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Handling:** Nonrefillable container; do not reuse or refill this container. Triple rinse (or equivalent) container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available; or reconditioning, if appropriate; or puncture and dispose of in a sanitary landfill; or by incineration.

Lot number located on container or label.

### WARRANTY DISCLAIMER

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

### Inherent Risks of Use

The directions for use 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 application, all of which are beyond the control of the Manufacturer. To the extent not prohibited by applicable law, the buyer/user assumes all such risks.

### Limitation of Remedies

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

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

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

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

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



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