

THE NATURAL SOLUTION FOR *H. annosum* BUTT ROT



CELLU-TREAT®
DOT WOOD PRESERVATIVE



CELLU-TREAT kills and prevents *Fommes*. It is a soluble borate powder that can be sprayed on using a simple backpack sprayer or applied during harvest with a stump spray bar.

One pound of Cellu-Treat makes 2 gallons of solution and covers 400 sq. ft. (2,000 six-inch stumps or 480 twelve-inch stumps).



For more information or to purchase, visit

www.CelluTreat.com.



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

Active ingredient:

Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)..... 98%

Other ingredient* 2%

Total 100%

*Contains 2% H₂O - 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 with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

First Aid	
If Swallowed:	<ul style="list-style-type: none">• 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 not give anything by mouth to an unconscious person.
If Inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
If in Eyes:	<ul style="list-style-type: none">• 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.

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.

Environmental Hazards

This pesticide is toxic to fish and wildlife. 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 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.

NOTICE

Read and understand the entire label before using.

Use only according to label directions.

Before buying or using this product, read **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.

For Annosus Root Disease Control Cellu-Treat DOT Wood Preservative Solutions to Annosus Root Disease (*Heterobasidion annosum* (Fr.) Bref.) to Treat the Top of Freshly Cut Stumps:

Dilute **Cellu-Treat DOT Wood Preservative** to a 5% active solution by thoroughly mixing 1/2 pound **Cellu-Treat DOT Wood Preservative** per gallon of water. Using a mechanical harvester, back-pack 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 four hundred (400) square feet of stump surface area will treat 400 to 2,000 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 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: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

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 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:

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) **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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Material Safety Data Sheet

DOT Cellu-Treat®

WOOD PRESERVATIVE

Health Emergencies: CHEMTREC® (800) 424-9300

SECTION I – COMPANY AND PRODUCT IDENTIFICATION

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

Product name: Cellu-Treat®

Product use: Wood Preservative

Chemical formula: $\text{Na}_2\text{B}_4\text{O}_{10} \cdot 4\text{H}_2\text{O}$

Chemical name/synonyms: Disodium octaborate tetrahydrate

Chemical family: Inorganic borates

CAS registry number: 12280-03-4

EPA registration number: 64405-8

(Refer to Section IS for TSCA/DSL Chemical inventory listing)

SECTION II – HAZARD IDENTIFICATION AND PERSONAL PROTECTIVE EQUIPMENT INFORMATION

EMERGENCY OVERVIEW: Cellu-Treat 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 Cellu-Treat 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 Cellu-Treat is poorly absorbed through intact skin.

INHALATION: Occasional mild irritation effects to nose and throat may occur from inhalation of Cellu-Treat dust at levels greater than 10 mg/m³.

EYE CONTACT: Cellu-Treat is non-irritating to eyes in normal use.

SKIN CONTACT: Cellu-Treat does not cause irritation to intact skin.

INGESTION: Products containing Cellu-Treat are not intended for ingestion. Cellu-Treat 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: Cellu-Treat is not a known carcinogen.

Signs and symptoms of exposure: Symptoms of accidental over-exposure to Cellu-Treat 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 (Cellu-Treat) is considered to be a nuisance dust by OSHA, Cal OSHA, and ACGIH. The OSHA/PEL is 15mg/m³ total dust and 5mg/m³ respirable dust. The Cal OSHA/PEL and ACGIH/TLV are 10 mg/m³. 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: Cellu-Treat 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 Cellu-Treat and place in container 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.

Cellu-Treat 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 Cellu-Treat is not flammable, combustible or explosive. The product is itself a flame retardant.

Extinguishing Media: Any extinguishing media may be used on nearby fires.

Flammability Classification (29CFR1910.1200): Non-flammable solid.

General: Cellu-Treat 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 explosive hazard.

SECTION VII – TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion: Low acute oral toxicity; LD₅₀ in rats is 2,550 mg/kg of body weight.

Skin/dermal: Low, acute dermal toxicity; LD₅₀ in rabbits is greater than 2,000 mg/kg of body weight. Cellu-Treat is poorly absorbed through intact skin.

Inhalation: Low acute inhalation toxicity; LD₅₀ 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 Cellu-Treat indicates no adverse effects on human eye. Therefore Cellu-Treat is not considered to be a human eye irritant in normal industrial use.

Sensitization: Cellu-Treat is not a skin sensitizer.

SECTION VIII – ECOLOGICAL INFORMATION

Ecotoxicity Data

General: Boron (B) is the element in disodium octaborate tetrahydrate (Cellu-Treat) 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*
24-hr EC₅₀ = 242 mg B/L

Test substance: sodium tetraborate

Fish Toxicity:

Seawater:

Dab, *Limanda limanda*

96-hr LC₅₀ = 74 MG B/LL

Freshwater:

Rainbow trout, *S. gairdneri* (embryo-larval stage)

24-day LC₅₀ = 88 mg B/L

32-day LC₅₀ = 54 mg B/L

Goldfish, *Carassius auratus* (embryo-larval stage)

7-day LC₅₀ = 65 mg B/L

3-day LC₅₀ = 71 mg B/L

SECTION IX – DISPOSAL CONSIDERATIONS

Disposal Guidance: Consult state and local authorities for disposal guidelines.

RCRA (40 CFR 261): Cellu-Treat 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: Cellu-Treat 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

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 (Cellu-Treat) 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-I, 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 (Cellu-Treat) 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 (Cellu-Treat) is not regulated by the U.S. Department of Transportation.

For further information contact: Nisus Corporation

Technical and Sales Support: 1-800-264-0870

SECTION XVI – OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This information and product are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof.



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