

17.25.76

DIP-DIFFUSION TREATMENT

PREPARATION OF SOLUTIONS: To prepare solutions, described below, water should be added to the tank to about 80% of the volume of solution required. The temperature is then raised to the desired level and the calculated amount of TIM-BOR is gradually added with good agitation. The remaining water is then added and the solution agitated for an additional 10 minutes to insure that all of the product has dissolved. The temperature of the solution should be maintained during treatment. Upon cooling some borate may crystallize out of the solution, but will redissolve when the solution is heated for the next treatment session. In very cold weather, some heating or insulation should be provided to prevent solidification in the bottom of the tank. The tank should be covered when not in use to prevent contamination and evaporation of water.

Suggested Conditions and Solution Strengths for the Dip-Diffusion Method

Lumber Thickness	Pounds of TIM-BOR Per Gallon of Water	Solution Temperature	Diffusion Complete In
Up to 1 inch (2.5cm)	1.4	105°F(40°C)	2 to 4 weeks
1 to 1.75 inches (2.5 to 4.0cm)	1.8	120°F(50°C)	4 to 6 weeks
1.75 to 2.5 inches (4.0 to 6.5cm)	2.5	130°F(55°C)	4 to 6 weeks
2.5 to 3 inches* (6.5 to 7.5cm)	2.8	135°F(57°C)	6 to 8 weeks

*Lumber over 3 inches (7.5cm) in thickness or over 5 inches (12.5cm) in width should be dipped twice 24 to 72 hours apart.

DIP-DIFFUSION METHOD OF APPLICATION: Dip freshly-cut lumber in a tank containing a hot aqueous solution of TIM-BOR for 2 to 5 minutes. After dipping, the newly treated wood should be stacked and stored under a tarpaulin or shed roof to slow the drying process and prevent washoff by rainfall, thus improving penetration. Diffusion of the wood preservative into the interior of the wood will start immediately and will require several weeks to thoroughly penetrate the lumber, depending on species and thickness of wood. The dip-diffusion method of treatment can result in complete penetration throughout the cross-sectional area of treated lumber.

PRESSURE TREATMENT

Pressure treatment of wood should result in a retention of 0.3 lb/ft³ (4.8 kg/m³) TIM-BOR in the assay zone specified in AWPA standard C-2. 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 1-2% (0.1-0.2 lb/gal) w/v. Standards C-1 and C-2 of the American Wood Preservers' Association should be consulted regarding treatment times, pressures and temperatures necessary for various species of wood.

Clean wood should be cut to dimension, dried to less than 25% moisture (as oven dry weight), and stickered before treating. If several species are being treated at once, the treatment schedule should be chosen for the most difficult to treat species. If both sapwood and heartwood are included, use the schedule for heartwood to ensure adequate loadings.

NOTICE

Because of many varying conditions affecting 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 by fungi or other organisms is not guaranteed. Neither 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 nor with respect to breach of any warranty not expressly specified hereon. 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. Neither manufacturer nor seller, makes, and their employees and agents are not permitted to make, any representations or warranties, express or implied by law, not specifically set forth herein.



USBORAX
 A 20 MULE TEAM[®] Product Manufactured by:
 United States Borax & Chemical Corporation
 Los Angeles, CA 90010

EPA Reg. No. 1624-39
EPA Est. 1624-CA-1

Net Contents: 50 lbs. (22.7 kg.)

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1/18

AUG 20 1990

PM 21
1624-39
pg. 1067

Mr. Philip L. Strong
U.S. Borax Research Corporation
412 Crescent Way
Anaheim, CA 92801

Dear Mr. Strong:

Subject: Add Remedial Treatment and Additional Pests
Tim-Bor
EPA Registration No. 1624-39
Your Submission Dated March 2, 1990

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable provided that you:

1. Make the labeling change listed below before you release the product for shipment bearing the amended labeling:
 - Under Environmental Hazards, change the second sentence to "Do not contaminate water when disposing of equipment washwaters."
2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

SL

Susan T. Lewis
Product Manager (21)
Fungicide Branch
Registr. Division (N7505C)

Enclosure

61603:I:Davis:WP5.0:A:C.Disk.ENCLOSURE/07/90:CL:VO:EK:CL
CONCURRENCES

SYMBOL							
SURNAME							
DATE							

PRECAUTIONARY STATEMENTS:
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Wash thoroughly after handling. Avoid contamination of food and feed. Do not leave container where children or animals may gain access.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED, Immediately contact a physician or Poison Control Center. If these are unavailable, give the victim 1 or 2 glasses of water and induce vomiting by touching back of throat with fingers. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES, flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN, remove contaminated clothing and wash skin with soap and water.

IF INHALED, remove victim to fresh air.

ENVIRONMENTAL HAZARDS

TIM-BOR or TIM-BOR solutions 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 apply directly to water.

DIRECTIONS FOR USE

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

TIM-BOR is a water soluble inorganic borate salt for the protection and treatment of lumber against decay fungi and wood boring beetles including Powder Post Beetles (*Lycitidae*), Furniture Beetles (*Anobiidae*), Old House Borer and Longhorn Beetles (*Cerambycidae*). This treatment is not effective against wood staining fungi and may require mixing with compatible products. TIM-BOR also controls Subterranean Termites (*Reticulitermes*, *Coptotermes*), Dampwood Termites (*Zootermopsis*) and Drywood Termites (*Kalotermes*, *Incisitermes*).

TIM-BOR is recommended for all interior and exterior wood which will be protected from rain and not in direct contact with soil. The treatment of lumber is permanent even after cutting and finishing providing the wood is not exposed to moisture or in contact with the soil.

STORAGE AND DISPOSAL

Do not contaminate water when disposing of equipment washwaters.

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 bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state or local authorities, by burning. If burned, stay out of smoke.

Re-wood

**20 MULE TEAM®
TIM-BOR®**

A. WOOD PRESERVATIVE FOR PROTECTION AND TREATMENT OF LUMBER AGAINST FUNGAL DECAY AND WOOD DESTROYING INSECTS INCLUDING TERMITES

ACTIVE INGREDIENT:
Disodium Octaborate Tetrahydrate 98%
($\text{Na}_2\text{B}_4\text{O}_{13} \cdot 4\text{H}_2\text{O}$)

INERT INGREDIENT 2%

ACCEPTED
AUG. 20, 1980
EPA #
1624-34

w/ comments

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See Side Panel For Additional Precautionary Statements and Practical Treatment

A 20 MULE TEAM® Product



Manufactured by:
United States Borax & Chemical Corporation
Los Angeles, CA 90010

EPA Reg. No. 1624-39 EPA Est. 1624-CA-1

Net Contents: 50 lbs. (22.7 kg.)

DIP-DIFFUSION
PREPARATION OF SOLUTION:
As described below, water should be added to the volume of solution required to the desired level and the solution gradually added with good stirring. Then added and the solution allowed to stand for 10 to 15 minutes to insure that all the borate has dissolved. The temperature of the solution should be maintained at 60 to 70 degrees Fahrenheit. Upon cooling some precipitation may occur, but will redissolve upon next treatment session. In winter, insulation should be provided to the bottom of the tank. The tank should be covered to prevent contamination and evaporation.

SUGGESTED CONDITION FOR THE DIP-DIFFUSION METHOD

Lumber Thickness	Pounds of TIM-BOR Per 100 Gallons of Solution
Up to 1 inch (2.5cm)	140
1 to 1.75 inches (2.5 to 4.0cm)	180
1.75 to 2.5 inches (4.0 to 6.5cm)	250
2.5 to 3 inches (6.5 to 7.5cm)	280

*Lumber over 3 inches (7.5 cm) in width should be treated by the DIP-DIFFUSION METHOD. Lumber in a tank containing solution for 2 to 6 minutes. After dipping, lumber should be stacked and stored under a drying process and prevent moisture penetration. Diffusion of the solution into the wood will start immediately and will penetrate the wood to the thickness of wood. The end result is complete penetration of the solution in the sectional area of treated lumber.

PRESSURE TREATMENT:
Pressure treatment of wood with 10% (4.8 kg/m³) TIM-BOR Standard C-2 for waterborne application. The solution must be adjusted to the wood species and size being treated. The range of 1-2% (0.1-0.2 lb/gal) is recommended. The American Wood Preservers Institute should be consulted regarding temperatures necessary for treatment.

Clean wood should be cut to the desired size and moisture (as oven dry weight) should be chosen for the material. Sapwood and heartwood should be treated to ensure adequate penetration.

Because of many varying conditions, manufacturer warrants no representation or effect of the product. Complete prevention of decay is not guaranteed. Neither manufacturer nor distributor assumes any liability or responsibility for any injury or damage resulting from the use of this product for a purpose not intended or in a manner contrary to the directions. Buyer accepts this material as is, with all risks of usage and handling. In accordance with this label, the manufacturer, distributor, and their employees make no representations.

Disodium Octaborate Tetrahydrate988
(Na₂B₈O₁₃·4H₂O)

INERT INGREDIENT 28

KEEP OUT OF REACH OF CHILDREN

CAUTION

ACCEPTED w/
Comments
AUG. 20, 1990
EPAH
1624-341

PRECAUTIONARY STATEMENTS: Hazards to Humans and Domestic Animals

Harmful if swallowed. Wash thoroughly after handling. Avoid contamination of food and feed. Do not leave container where children or animals may gain access.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED, immediately contact a physician or Poison Control Center. If these are unavailable, give the victim 1 or 2 glasses of water and induce vomiting by touching back of throat with fingers. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES, flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN, remove contaminated clothing and wash skin with soap and water.

IF INHALED, remove victim to fresh air.

ENVIRONMENTAL HAZARDS

TIM-BOR or TIM-BOR solutions 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 apply directly to any body of water.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. 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 bag into application equipment. Then 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.

DIRECTIONS FOR USE

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

TIM-BOR is a water soluble inorganic borate salt for the protection and treatment of lumber and wood-foam composite structural components against decay fungi and wood boring beetles including Powder Post Beetles (Lyctidae), Furniture Beetles and Old House Borers (Anobiidae), and Longhorn Beetles (Cerambycidae). This treatment is not effective against wood staining fungi and may require mixing with compatible products. TIM-BOR also controls Subterranean Termites (Reticulitermes, Coptotermes, Heterotermes), Dampwood Termites (Zootermopsis), Drywood Termites (Kaloterms, Incisitermes), and Carpenter Ants (Camponotus).

TIM-BOR is recommended for all interior and exterior wood and wood-foam composite structural components which will be protected from rain and not in direct contact with soil. The treatment of lumber is permanent even after cutting and finishing providing the wood is not exposed to moisture or in contact with the soil.

This product is toxic to wood destroying insects but surface etching of treated wood and wood-foam composite structural components may occur.

DIP-DIFFUSION TREATMENT

PREPARATION OF SOLUTIONS: To prepare solutions, described below, water should be added to the tank to about 80% of the volume of solution required. The temperature is then raised to the desired level and the calculated amount of TIM-BOR is gradually added with good agitation. The remaining water is then added and the solution agitated for an additional 10 minutes to insure that all of the product has dissolved. The temperature of the solution should be maintained during treatment. Upon cooling some borate may crystallize out of the solution, but will redissolve when the solution is heated for the next treatment session. In very cold weather, some heating or insulation should be provided to prevent solidification in the bottom of the tank. The tank should be covered when not in use to prevent contamination and evaporation of water.

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Suggested Conditions and Solution Strengths for the Dip-Diffusion Method

<u>Lumber Thickness</u>	<u>Pounds of TIM-BOR For 100 Gallons Solution</u>	<u>Solution Temperature</u>	<u>Diffusion Complete In</u>
Up to 1 inch (2.5cm)	140	105°F(40°C)	2 to 4 weeks
1 to 1.75 inches (2.5 to 4.0cm)	180	120°F(50°C)	4 to 6 weeks
1.75 to 2.5 inches (4.0 to 6.5cm)	250	130°F(55°C)	4 to 6 weeks
2.5 to 3 inches* (6.5 to 7.5cm)	280	135°F(57°C)	6 to 8 weeks

*Lumber over 3 inches (7.5cm) in thickness or over 5 inches (12.5cm) in width should be dipped twice 24 to 72 hours apart.

DIP-DIFFUSION METHOD OF APPLICATION: Dip freshly-cut lumber in a tank containing a hot aqueous solution of TIM-BOR for 2 to 5 minutes. After dipping, the newly treated wood should be stacked and stored under a tarpaulin or shed roof to slow the drying process and prevent washoff by rainfall, thus improving penetration. Diffusion of the wood preservative into the interior of the wood will start immediately and will require several weeks to thoroughly penetrate the lumber, depending on species and thickness of wood. The dip-diffusion method of treatment can result in complete penetration throughout the whole cross-sectional area of treated lumber.

PRESSURE TREATMENT

Pressure treatment procedures must rigidly adhere to the current specifications of U.S. Borax and/or those of the American Wood Preservers' Association (AWPA) as outlined in ASWP Standard C1 and the Standard for Preservative Treatment by Pressure Processes with boron.

REMEDIAL TREATMENT

For remedial control of organisms attacking wood, apply a 10% aqueous solution of TIM-BOR (1 lb/ gallon solution). Solution may be applied by brush or spray until surface thoroughly wetted (approximately 7-10 gallons per 1000 sq. ft.). For timbers 2 inches in thickness or greater, apply a second application 6 to 24 hours after the initial treatment. Application may also be made by drilling and then injecting the solution directly into the infested area. Inject a sufficient amount of solution to cause run-off from exit holes drilled into the infested member.

PREPARATION OF SOLUTIONS: To prepare solutions described above, water should be added to the tank to about 80% of the final volume of solution required. While agitating, 1.0 pound of TIM-BOR is then gradually added for each gallon of treating solution that is required. The remaining water is then added and the solution is agitated until the product has dissolved.

Alternatively, apply TIM-BOR dust to infested members by drill and injection directly into galleries or dust wood surfaces and wall voids at a rate of 2 to 3 pounds per 100 sq. ft.

PRE-TREATMENT

Wood and wood-foam composite structural components may be treated to prevent infestation of attacking organisms using the spray application method described above. For timbers 2 inches in thickness or greater apply a second application 6-24 hours after the first. Current U.S. Borax and/ or American Wood Preservers' Association specifications and test methods should be followed to ensure adequate chemical loadings in wood.

NOTICE

Because of many varying conditions affecting 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 by fungi or other organisms is not guaranteed. Neither 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 nor 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. Neither manufacturer nor seller, makes, and their employees and agents are not permitted to make, any representations or warranties, express or implied by law, not specifically set forth herein.

A 20 MULE TEAM® Product

LOGO

Manufactured by:
United States Borax & Chemical Corporation
Los Angeles, CA 90010

EPA Reg. No. 1624-39
EPA Est. 1624-CA-1

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1084/1088(04)

Net Contents: 50 lbs.(22.7 kg.)

