



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  
3008-69

Date of Issuance:  
FEB 28 1996

Term of Issuance:  
Conditional

Name of Pesticide Product:  
Bardec Part 1

NOTICE OF PESTICIDE:  
  X   Registration  
       Reregistration  
  
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Osmose Wood Preserving, Inc.  
980 Ellicott St.  
Buffalo, NY 14209

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label changes listed below before you release the product for shipment:

a. Add the phrase, "EPA Reg. No. 3008-69".

b. In the technical bulletin delete "Equivalent volume of bulk Arsenic Acid can be used if available". This implies that an unregistered source of arsenic acid could be used to make a wood preserving solution which is a violation of FIFRA.

Signature of Approving Official:

*Theresa A. Stone*

Date:

*02/28/96*

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3. Submit one (1) copy of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

*Theresa A. Stowe*

Theresa A. Stowe  
Acting Team Leader  
Product Manager (22)  
Fungicide-Herbicide Branch  
Registration Division (7505C)

Enclosure

### DIRECTIONS FOR USE

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

Sold only for formulating BARDEC solutions for pressure treated wood products. Use with caution strictly with manufacturer's instructions. More detailed instructions for use are included in the technical bulletin.

Refer to label attachment "Permissible Exposure Limit (PEL) Monitoring Program" for additional information concerning the use of this product.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public 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 treatment plant authority. For guidance contact your State Water Board or Regional Office of the Environmental Protection Agency.

### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. BARDEC Part 1 has acidic properties and reacts with galvanized metals, black iron and certain other metals. Do not use galvanized metal containers as highly toxic arsine gas may be formed. To reduce possible corrosion to metals and other parts, all equipment which has been in contact with or exposed to BARDEC Part 1 should be thoroughly washed with water immediately after use.

**Note to User:** Examples of acceptable materials for protective clothing (e.g., gloves, overalls, jackets, and boots) required during application and handling of inorganic arsenicals are vinyl, polyvinyl chloride (PVC), neoprene, NBR (Buna N), rubber and polyethylene.

### STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.  
**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your state Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.  
**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

FEB 28 1996

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

3008-69

### RESTRICTED USE PESTICIDE DUE TO CARCINOGENICITY

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THE  
DIRECT SUPERVISION, AND FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S  
CERTIFICATION.

# BARDEC PART 1 WOOD PRESERVATIVE

For manufacturing BARDEC Wood Preservative only.

#### ACTIVE INGREDIENTS:

Arsenic Acid ..... 75.0%

INERT INGREDIENTS ..... 25.0%

Total 100.00%

Total Arsenic, all in water soluble form expressed as metallic is 39.6%

KEEP OUT OF REACH OF CHILDREN

**DANGER**



**POISON**

### STATEMENT OF PRACTICAL TREATMENT

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**IF SWALLOWED:** Call a physician or Poison Control Center at once. Dilute stomach contents giving patient two to four glasses of milk or water. Induce vomiting by touching back of throat with finger. Give four ounces of milk of magnesia followed by whites of two eggs beaten in a glass of water or milk. Keep patient calm and warm to avoid shock. (Do not induce vomiting or give anything by mouth to an unconscious person).

**IF IN EYES:** Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Get medical attention.

**IF INHALED:** Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. Get medical attention.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA EST. NO. 3008-TN-1

EPA REG. NO. 3008-TN-1



Osmose Wood Preserving, Inc.  
980 Ellicott Street  
Buffalo, NY 14209

NET CONTENTS:

BARDEC PART 1 is arsenic acid. It is intended to be mixed with other components to formulate BARDEC wood preservative solutions for use in pressure treatment. The mixing instructions must be followed carefully to ensure that the treatment solution conforms with AWWA specification P5(3)-95. Further information and assistance in solving particular problems is available from Osmose Wood Preserving, Inc. BARDEC wood preservative should be used in accordance with the AWWA standards. Wood products treated with BARDEC in accordance with AWWA standards should be handled in the same manner as those treated with ACA.

TYPICAL BARDEC MIX:

4384 pounds dry oxide basis containing: 1805 pounds of BARDEC PART 1 (Arsenic Acid), 2,110 pounds of BARDEC PART 2 (Cuprous Oxide), 1100 pounds BARDEC PART 3 (Zinc Oxide).  
Aqua Ammonia equivalent to 3024 pounds Anhydrous Ammonia.  
2016 pounds Ammonium Bicarbonate or equivalent in Ammonia and Carbon Dioxide.

Larger or smaller mixes may be made by varying in proportion the constituent parts.

- STEP 1. Add initial water to mix tank. As Aqua Ammonia concentration will affect quantities of water used, see Table 1 for initial water quantity. Turn on agitator.
- STEP 2. 1805 pounds of BARDEC PART 1 (Arsenic Acid 75% concentration) will be added now. The mix tank should have an Arsenic Acid addition system as shown on the attached sketches. The Arsenic Acid is pumped into the mixer, using a corrosion-resistant drum pump and Acid-resistant hose or piping. Upon emptying each drum of Arsenic Acid it should be rinsed with about eight gallons of water sprayed into and around the drums inside. This rinsate should be transferred to the mixer. Repeat this washing two more times for each drum, resulting in three complete washings of each drum. Replace the 2" diameter plugs in the drums.
- NOTE: 75% Arsenic Acid is a strong Acid and should be handled with care. In handling, workers should wear rubber coats, pants, and gloves and an Acid-resistant plastic face shield.
- Equivalent volume of bulk Arsenic Acid can be used if available.
- STEP 3. Close the hatch and open vent line valve to the Ammonia scrubber system.
- STEP 4. Add Aqua Ammonia containing about 1,840 pounds of Anhydrous Ammonia. (Approximately 850 gallons of 29% NH<sub>4</sub>OH).
- STEP 5. Add: 2,110 pounds BARDEC PART 2 (Cuprous Oxide) as supplied;  
1100 lbs. BARDEC PART 3 (Zinc Oxide) as supplied;  
2016 lbs. Ammonium Bicarbonate (if used as powder).
- STEP 6. Agitate mix while sparging with air, noting temperature increase for two hours.
- STEP 7. Add final Aqua-Ammonia as shown in Table 1 and continue agitation until temperature stops rising.
- STEP 8. Withdraw a sample from the mix tank toward the end of the Step 7 agitation period. Allow the sample to settle for a few minutes and note if any metallic Copper is visible in the settlings. If there is, continue agitation with periodic samplings until no metallic copper is visible in the settling. When visible metallic copper is absent, test for the presence of unreacted copper by the AWWA test method. A negative test for unreacted metallic copper indicates the mix is completed.
- STEP 9. Add water, if necessary, to bring product to desired concentration.

**Table 1**

<b>Gallons of Water and Ammonia Depending on Ammonia Concentration</b>			
<b>Percent Ammonia</b>	<b>Step - 1 Water</b>	<b>Step - 2 Drum Wash Water</b>	<b>Step - 7 Final Ammonia</b>
10	1283	48	1512
12	1584	48	1270
14	1736	48	1080
16	1886	48	966
18	1987	48	864
20	2067	48	784
22	2133	48	718
24	2188	48	662
26	2234	48	616
28	2274	48	576
30	2309	48	540

**ACCEPTED**  
with **COMMENTS**  
In EPA Letter Dated

FEB 23 1988

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