U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Antimicrobials Division (7510C)
1200 Pennsylvania Avenue N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_x_ Registration
____ Reregistration

(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
6836-304	MAY 14 2003

Term of Issuance:
This Notice of Registration expires on 5/14/2005

Name of Pesticide Product:
Carboquat WP-50

Name and Address of Registrant (include ZIP Code):
Lonza, Inc
17-17 Route 208
Fair Lawn, NJ 07401

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)(C) provided that:

1. The following data must be submitted to the Agency by May 14, 2004:

A. 21-day dermal toxicity study on the end-use formulation
B. "Surface Residue Wipe" data using methodology consistent with CCA treated wood
C. 850. 1300 - Fish Early Life-Stage with Freshwater species (study in review)
D. 850.1400 - Aquatic Invertebrate Life-cycle with Freshwater species
E. 850.1730 - Fish Bioaccumulation Factor Test
F. 850.1735 - Whole Sediment Acute Toxicity to Freshwater Invertebrates

Signature of Approving Official:

Velma Noble, Product Manager 31
Regulatory Management Branch 1
Antimicrobial Division (7510C)

Date:
MAY 14 2003

EPA Form 8570-6

G. 850.1740 - Whole Sediment Acute Toxicity to Marine Invertebrates
H. 850.3020 - Honeybee Acute Contact LD50
I. 850.4225 - Seedling Emergence Dose-Response in Rice (Oryza sativa)
J. 850.4250 - Vegetative Vigor Dose-Response in Rice (Oryza sativa)
K. 850.4400 - Vascular Aquatic Plant Toxicity Dose-Response
L. 850.5400 - Algal Toxicity Dose-Response using 4 species (study 1 species in review)
M. 835.4200 - Anaerobic Soil Metabolism
N. 835.1240 - Soil Column Leaching
O. (No Guideline) Water Column and Aquatic Sediment Monitoring of Docks treated with Bardac 22C50. Refer to comment #2 for further details on the monitoring requirement.

2. A protocol describing how the water column and aquatic sediment monitoring of docks treated with Bardac 22C50 study will be conducted must be submitted by 11/14/03. The actual study is due within 9 months from the date of acceptance of the protocol.

3. The submitted data in items #1 and #2 above must be submitted and found to be acceptable in order for the EPA to change the "Terms of Issuance" of this registration. If any of the submitted data are not found to be acceptable, this registration will automatically expire on 5/14/2005.

4. Make the following changes to the label.

A. Add the phrase EPA Registration Number "EPA Reg. No. 6836-304".
B. Revise the "Environmental Hazards" statement to include the statement: "This product is toxic to fish *and aquatic invertebrates*."
C. Revise the Hazards To Humans And Domestic Animals paragraph to read: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed or inhaled . Do not get in eyes, in eyes, on skin or on clothing. Do not breathe vapor. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Harmful if absorbed through the skin.

The language including and after Personal Protective Equipment (PPE) are correct.

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

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A stamped copy of the label is enclosed for your records. Submit one (1) copy of the final printed label prior to the release of the product for shipment. If you have any questions concerning this letter, please contact Jacquie McFarlane at (703) 308-6416.

Sincerely,

Velma Noble
Product Manager 31
Regulatory Management Branch 1
Antimicrobial Division (7510C)

Enclosure: stamped label

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Technical Bulletin
Carboquat WP-50
Wood Preservative for Pressure Treatment

1. Introduction

Carboquat WP-50 is a 50% concentrate solution of Didecyl dimethyl ammonium carbonate and Didecyl dimethyl ammonium bicarbonate. It is a waterborne preservative used to protect wood articles from the destruction by fungal decay, mold and mildew. Carboquat WP-50 is to be applied only by wood preserving plants to pressure treat wood articles.

Wood articles treated with Carboquat WP-50 are appropriate for use in above-ground, ground contact and fresh water contact applications and resist attack by rot and fungal decay. Carboquat WP-50 cannot be used to treat wood intended for direct continuous salt water (marine) immersion. Restrictions and limitations will be included on the treated wood end tag.

2. Description of the Preservative System

Carboquat WP-50 is an end-use product, intended for sale to wood treating plants. It can be used alone or in combination with other EPA-registered organic and inorganic wood preservatives, provided that mixing is not inconsistent with the labeling of any product in the mixture. Registered alkaline copper wood preservatives are particularly appropriate to use with Carboquat WP-50 to produce a copper-quat mixture.

Carboquat WP-50 is shipped as a 50 percent concentrate. It must be diluted to a working strength of from 0.6 to 3.9 % active by mixing Carboquat WP-50 with water and the copper product before application. When used alone, prepare a 0.5 to 3.0% active use-solution of Carboquat WP-50 in water. A mix table for half-percent increments in concentrate is attached.

3. Materials to be Treated

Carboquat WP-50 is used to pressure treat the following materials:

3.1 Dimensional lumber and timbers of the following sapwood species: Southern Pine, Ponderosa Pine, Red Pine, Radiata Pine and Caribbean Pine;

3.2 Dimensional lumber and timbers of the following heartwood species: Douglas-Fir, Western Hemlock, Hem-Fir, Lodgepole Pine, Jack Pine and Redwood;

3.3 Maximum nominal size of 2-by-8 in all listed species for decking use only;

3.4 Southern Pine and Douglas-Fir plywood;

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3.5 Round and sawn posts and building poles of Southern Pine, Ponderosa Pine, Red Pine, Douglas-Fir, Hem-Fir and Western Hemlock.

Minimum preservative retention levels are provided below in **Table 1**.

Table 1
Minimum Preservative Retention Requirements for Wood Treated with Carboquat WP-50 Articles by End Use

End Use	Min. Activities[1]. Retention of CuO + quat pcf (Kg/m^3)	Min. Activities[1]. Retention of quat pcf (Kg/m^3)
Above Ground - General Use	0.25 (4.0)	0.08(1.32)
Decking & Specialties Use - Above Ground		
Sapwood Species Listed in Section 3.1	0.15 (2.4)	0.05 (0.80)
Heartwood Species Listed in Section 3.2	0.25 (4.0)	0.08 (1.32)
Ground & Fresh Water Contact	0.40 (6.4)	0.13 (2.11)
Critical Structural Members	0.60 (9.6)	0.20 (3.20)
Wood Foundation Systems	0.60 (9.6)	0.20 (3.20)

Table 1 Note:
[1] Pounds of preservative per cubic foot of wood.

4. Wood Treatment

Plant Equipment: Treating plants shall be equipped with the thermometers, gauges, and recorders necessary to indicate and record accurately the conditions within the treating cylinder during all stages of treatment. Whenever it is practicable the material in any charge shall consist of pieces of the same species similar in form and size, moisture content and receptivity to treatment.
Marking: Lumber, timber, and plywood shall be marked to indicate the intended end use "**above ground**," "**ground & fresh water contact**" identifying both the preservative and the specified retention.
Manner of Treatment: The material shall be impregnated with preservative by a combination of such processes and under such conditions as will produce a satisfactory product for the use intended as described below:

Empty Cell Treatment: Prior to the introduction of preservative, material shall be subjected to atmospheric air pressure or to higher air pressures of the necessary intensity and duration. A final vacuum of not less than -77 kPa (22 in. Hg) shall be used.

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Modified Full Cell Treatment: Prior to introduction of preservative, material shall be subjected to a vacuum of less than -77 kPa (22 in. Hg) (sea level equivalent). A final vacuum of not less than -77 kPa (22 in. Hg) shall be used.

Full Cell Treatment: Prior to introduction of preservative or during any period of condition prior to treatment, material shall be subjected to a vacuum of not less than -77kPa (22 in. Hg.) (sea level equivalent). A final vacuum of not less than 560 Kg/m_3 (22 in.) of mercury shall be used.

Initial Air Pressure or Vacuum shall be maintained while the cylinder is being filled with preservative. Pressure shall maintained until the desired volumetric injection has been obtained.

At the conclusion of the pressure period and after the cylinder has been emptied of preservative, a vacuum of not less than -77kPa (22 in. Hg.) at sea level may be created. This results in the material having drier surfaces upon removal from the cylinder.

5. Results of Treatment

Preservative Retention: Retentions shall be determined by wood assay or by plant gauge. Where retention by assay is specified, the retention shall be determined by extraction or analysis of the treated wood. Where retention by gauge is specified, the amount of preservative solution retained shall be determined from readings of working tank gauges or scales.

The minimum preservative retention levels to ensure adequate preservation are shown above in **Table 1.**

The vacuum-pressure treating process described in American Wood-Preservers' Association (AWPA) Commodity Standard C1-00 and in the Processing and Treatment Standard of the Use Category System (UCS) shall be used to produce wood articles treated with Carboquat WP-50.

6. Installation and Application

Wood articles pressure treated with Carboquat WP-50 are installed as preservative-treated lumber timbers and plywood in accordance with requirements of the applicable *Code*. The industry published installation instructions for wood and pressure-treated wood shall be strictly adhered to.

Wood articles pressure treated with Carboquat WP-50 are permitted in locations where wood is used and/or in locations required by the applicable *Code* to use building materials which are fungal decay resistant. The treated wood members are listed for use in above-ground and ground contact applications. Typical applications are listed below in **Table 2**.

Surface treat cut ends with appropriate registered preservative solution.

Locations requiring preservative-treated wood for fungal decay are listed in:

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Section 2304.11	*International Building Code*
Section 2304	*Standard Building Code*
Section 2311	*BOCA National Building Code*
Section 2306	*Uniform Building Code™*
Sections R323, R324	*International Residential Code™ for One- and Two-Family Dwellings*
Sections 322, 323	*International One and Two Family Dwelling Code.*

Table 2
Typical Applications
for Carboquat WP-50 Pressure Treated Wood Articles

Service Conditions	Typical Applications
Above Ground	Decking, Rails, Spindles, Trim and Fascia, Framing, Flooring, Sill Plates, Trellises, Gazebos, Fencing
Ground & Fresh Water Contact	Deck& Dock Support Posts, Fence Posts
Critical Structural	Permanent Wood Foundations, Building Poles

Structural - The maximum load duration factor allowed for structural articles pressure-treated with Carboquat WP-50 shall be 1.6 in accordance with section 2.3 of the **AFPA, National Design Specification for Wood Construction.**

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed or inhaled. Harmful if absorbed through the skin. Do not get in eyes, on skin or clothing.

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Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long-pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

Individuals who enter pressure treatment cylinders and other related equipment that are contaminated with the wood treatment solution (e.g., cylinders that are in operation or are not free of the treatment solution) must wear the following PPE: long-sleeved shirt and long-pants, chemical-resistant gloves, chemical resistant footwear plus socks, protective eyewear and a respirator with an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter.

Protective clothing must be changed when it shows signs of contamination. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Applicators must not eat or drink, or use tobacco products during those parts of the application process that may expose them to the wood treatment formulation (e.g., manually opening/closing cylinder doors, moving trams out of cylinders, chemicals, handling freshly treated wood).

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of wash waters. 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.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

CARBOQUAT WP-50

Active Ingredients:

Didecyl dimethyl ammonium carbonate and Didecyl dimethyl ammonium bicarbonate	50.0%
Inert Ingredients:	50.0%
TOTAL:	100.0%

Contains 7.7 lbs. of product per gallon

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have a 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 person.
If inhaled:	• 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.
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.	

SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS •

EPA Registration No. 6836 -
EPA Establishment No. 6836-IL-1
Net Contents

Manufactured by
LONZA, Inc. 17-17 Route 208, Fair Lawn, NJ 07401

Doc. #1190529 v 1 5/1/03 09:24 AM

CARBOQUAT WP-50 is a concentrated biocide for use as a wood preservative. When used as directed, CARBOQUAT WP-50 will protect treated wood articles from the destructive attack of fungi, mold and mildew.

DIRECTIONS FOR USE

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

CARBOQUAT WP-50 is an end-use product that is intended to be used with registered alkaline copper wood preservatives. Prepare a use-solution (0.6 - 3.9% active) by mixing CARBOQUAT WP-50 with water and the copper product according to the attached mixing table. CARBOQUAT WP-50 can also be used alone or in combination with other EPA-registered organic and inorganic wood preservatives, provided that mixing is not inconsistent with the labeling of any product in the mixture. When used alone, prepare a 0.5-3.0% active use-solution of CARBOQUAT WP-50 in water. A closed-system must be used when preparing the use-solution and for delivery of the use-solution to the treatment vessel.

PRESSURE TREATMENT INSTRUCTIONS

Place the wood article to be treated into the pressure cylinder and seal unit. Treat the wooden articles using the pressure treatment procedures consistent with the equipment being used and standard treatment practices. Treatment conditions must be calibrated to yield a 0.05 to 0.2 lb/ft^3 (0.8 to 3.2 kg/m^3) active retention in the treated article of didecyl dimethyl ammonium carbonate/bicarbonate. A final vacuum should be used during treatment process to remove any excess treatment solution from surface of treated wood article. Consult the CARBOQUAT WP-50 Technical Bulletin for additional information.

NOTE: CARBOQUAT WP-50 cannot be used to treat wood intended for direct continuous salt water (marine) immersion. Treated wood must be marked accordingly. In addition, CARBOQUAT WP-50 is not approved for treating wooden articles that are used or intended for use in the packaging of food or feed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:

Do not store on side. Avoid creasing or impacting of side walls.

PESTICIDE DISPOSAL:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these pesticides 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:

Plastic Container:
Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities by burning. If burned, stay out of smoke.

Metal Container:
Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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Solution Mixing Table for Alkaline Copper and DDACarbonate (2 Component System)

Solution Strength % Active	Component Balance Actives Basis (%)		To Mix 1000 Gallons Solution Combine following Gallons of		
	CuO	DDACarbonate	9% Alkaline Copper	DDACarbonate.(50%)	Water
0.60%	0.400%	0.200%	28.1	4.17	967.7
0.65%	0.433%	0.217%	30.5	4.52	965.0
0.70%	0.467%	0.233%	32.8	4.87	962.3
0.75%	0.500%	0.250%	35.2	5.23	959.6
0.80%	0.533%	0.267%	37.6	5.58	956.9
0.85%	0.567%	0.283%	39.9	5.93	954.1
0.90%	0.600%	0.300%	42.3	6.28	951.4
0.95%	0.633%	0.317%	44.7	6.64	948.7
1.00%	0.667%	0.333%	47.1	6.99	945.9
1.10%	0.733%	0.367%	51.8	7.70	940.5
1.20%	0.800%	0.400%	56.6	8.41	935.0
1.30%	0.867%	0.433%	61.4	9.12	929.4
1.40%	0.933%	0.467%	66.2	9.84	923.9
1.50%	1.000%	0.500%	71.1	10.55	918.4
1.60%	1.067%	0.533%	75.9	11.27	912.8
1.70%	1.133%	0.567%	80.7	11.99	907.3
1.80%	1.200%	0.600%	85.6	12.71	901.7
1.90%	1.267%	0.633%	90.5	13.43	896.1
2.00%	1.333%	0.667%	95.4	14.16	890.5
2.10%	1.400%	0.700%	100.2	14.89	884.9
2.20%	1.467%	0.733%	105.2	15.61	879.2
2.30%	1.533%	0.767%	110.1	16.35	873.6
2.40%	1.600%	0.800%	115.0	17.08	867.9
2.50%	1.667%	0.833%	120.0	17.81	862.2
2.60%	1.733%	0.867%	124.9	18.55	856.5
2.70%	1.800%	0.900%	129.9	19.29	850.8
2.80%	1.867%	0.933%	134.9	20.03	845.1
2.90%	1.933%	0.967%	139.9	20.77	839.4
3.00%	2.000%	1.000%	144.9	21.51	833.6
3.10%	2.067%	1.033%	149.9	22.26	827.8
3.20%	2.133%	1.067%	154.9	23.01	822.1
3.30%	2.200%	1.100%	160.0	23.76	816.3
3.40%	2.267%	1.133%	165.0	24.51	810.4
3.50%	2.333%	1.167%	170.1	25.26	804.6
3.60%	2.400%	1.200%	175.2	26.02	798.8
3.70%	2.467%	1.233%	180.3	26.77	792.9
3.80%	2.533%	1.267%	185.4	27.53	787.0
3.90%	2.600%	1.300%	190.6	28.29	781.2

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