

39967-13

10/01/2007

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

October 1, 2007

Luanne Jeram
Material Protection Products
Regulatory Affairs MPP
LANXESS Energizing Chemistry
111 RIDC West Park Drive
Pittsburgh, PA 15275-1112

Subject: Product Name: Preventol A8 Preservative
EPA Reg. No.: 39967-13
Application Date: 24-Sep-2007
Receipt Date: 26-Sep-2007

Dear Mrs. Jeram:

This acknowledges receipt of your notification, submitted under the provision of PR Notice 98-10, FIFRA 3(c) 9.

Proposed Amendment:

- Addition of "Sealant" as a use:
- Withdrawal of amend application dated 05/15/07 (update retention rates under categories "wood-based composite products and wood product intended for above ground and in-ground contact).

General Comments:

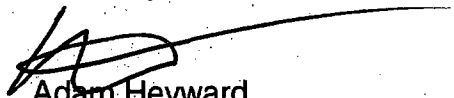
Based on a review of the material submitted, the following comments apply:

The notification application is acceptable.

As requested, your amended application dated May 15, 2007 has been withdrawn.

If you have any questions concerning this matter, please do not hesitate to contact me by telephone at (703) 308-6422 or e-mail at heyward.adam@epa.gov.

Sincerely,


Adam Heyward,
Product Team (34)
Regulatory Management Branch II
Antimicrobials Division (7510P)

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September 24, 2007

VIA Courier

Luanne Jeram
Material Protection Products
Regulatory Affairs
111 RIDC West Park Drive
Pittsburgh, PA 15275-1112

Phone 412-809-4773
Fax 412-809-1068
luanne.jeram@lanxess.com
www.US.LANXESS.com

Attention: Adam Heyward

Document Processing Desk (**NOTIF**)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

**RE: Product: Preventol A8 Preservative
Registration #: 39967-13
Label Change Notification**

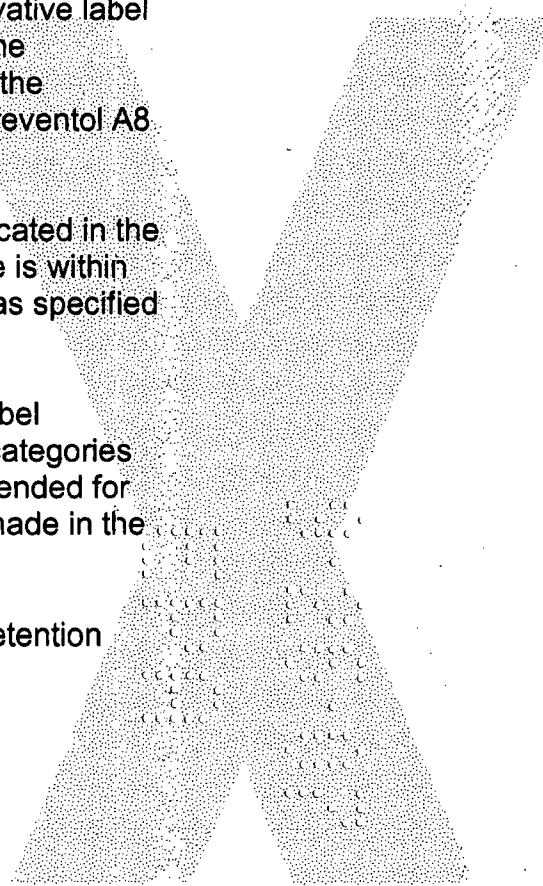
Dear Mr. Heyward:

Per our discussion this morning on the Preventol A8 Preservative label notification to add "sealant" as a use (August 2, 2007) and the previously requested (May 15, 2007) amendment to update the suggested retention rates, please find enclosed a revised Preventol A8 Preservative label.

This label reflects the addition of "sealant" as a use. As indicated in the August 2, 2007 request, per PR Notice 98-10, this substrate is within an already registered use pattern category for this product, as specified in 40 CFR Part 158 (indoor use).

Additionally, we would like to withdraw our request for the label amendment to update the suggested retention rates under categories "Wood-based Composite Products" and "Wood Products Intended for Above Ground and In-Ground Contact." This request was made in the May 15, 2007 communication.

This label includes the proposed sealant use; the updated retention rates have been removed.



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Specifically enclosed are:

1. EPA Form 8570-1
2. Stamped EPA label (dated December 9, 2003) – one copy
3. One current label (two changes been made via notification to the EPA)
4. One (1) label highlighting the proposed changes adding sealant use
5. Five (5) copies of the proposed label

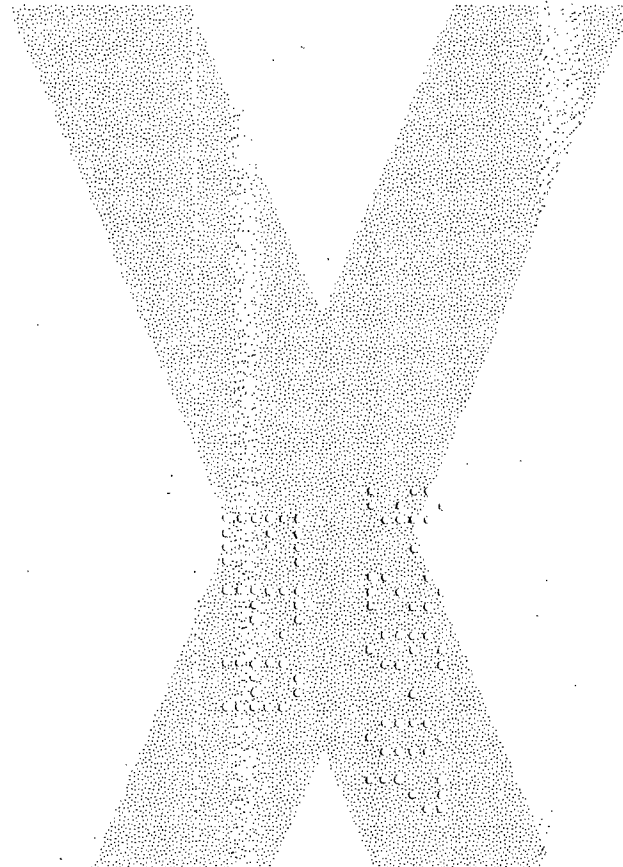
Please provide a stamped label.

Please contact me at 412-809-3577 if you have any questions.

Sincerely,



Luanne Jeram
Regulatory Affairs MPP



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United States Environmental Protection Agency Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number _____
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Application for Pesticide - Section I		
1. Company / Product Number <u>39967-13</u>	2. EPA Product Manager <u>Heyward</u>	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company / Product (Name) <u>Präventol A8 Preservative</u>	PM# <u>34</u>	
5. Name and Address of Applicant (include ZIP Code) <u>LANXESS Corporation</u> <u>111 RIDC Park West Drive</u> <u>Pittsburgh, PA 15275-1112</u> <input type="checkbox"/> Check of this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II	
<input type="checkbox"/> Amendment - Explain Below. <input type="checkbox"/> Resubmission in response to Agency letter dated _____ <input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application <input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 This notification is to add "sealant" use to the label. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III					
1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container		
* Certification must be submitted			<input type="checkbox"/> Metal <input type="checkbox"/> Plastic	<input type="checkbox"/> Glass <input type="checkbox"/> Paper	<input type="checkbox"/> Other (Specify) _____
			If "Yes" Unit Packaging wgt. _____	No. per container _____	If "Yes" Package Wgt _____
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) retail Container _____		5. Location of Label Directions _____	
6. Manner in Which Label is affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input type="checkbox"/> Paper glues <input type="checkbox"/> Stenciled					

Section - IV			
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary. To process this application.)			
Name <u>Luanne Jeram</u>	Title <u>Regulatory Affairs Principal</u>	Telephone No. (Include Area Code) <u>412-809-4773</u>	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received (Stamp) <div style="border: 1px dashed black; width: 100px; height: 100px; text-align: center; vertical-align: middle;"> (Stamp) </div>
2. Signature 		3. Title <u>Regulatory Affairs Principal</u>	
4. Typed Name <u>Luanne Jeram</u>		5. Date <u>9/24/07</u>	

Preventol[®] A8 Preservative

FUNGICIDE: FOR THE PRESERVATION OF WOOD-BASED COMPOSITE PRODUCTS, WOOD PRODUCTS INTENDED FOR ABOVE GROUND AND IN-GROUND CONTACT, PLASTICS, COATINGS AND PAINT SYSTEMS FOR IN-FILM PRESERVATION INCLUDING PAPER COATINGS FOR INDOOR, NON-FOOD CONTACT USES, GLUES, ADHESIVES, SEALANTS, AND METALWORKING FLUIDS AGAINST BIODETERIORATION.

ACTIVE INGREDIENT: TEBUCONAZOLE, α -[2-(4-Chlorophenyl)ethyl]- α -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol-----97%
INERT INGREDIENTS -----3%
TOTAL -----100.0%

KEEP OUT OF REACH OF CHILDREN WARNING!

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING! May be fatal if inhaled. Harmful if swallowed. Causes eye irritation. Do not breathe dust and avoid contact with eyes or clothing. Wear a mask or pesticide respirator jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

FIRST AID

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
IF IN EYES: 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 treatment advice.
IF SWALLOWED: 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.

NOTE TO PHYSICIAN: No specific antidote is available. Treat symptomatically.

The LANXESS Pittsburgh Emergency Response Telephone Number is 800-410-3063

NOTE TO USER: For worker protection during mixing, loading and during application, wear a hat, long sleeved shirt, and long legged trousers or overalls. In addition, during mixing and loading, wear rubber or neoprene gloves. Protective clothing should be laundered separately following application.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to estuarine invertebrates. 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 the discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

IN CASE OF EMERGENCY, CALL: CHEMTREC 800-424-9300

EPA Reg. No.: 39967-13

EPA Est. No.:

LANXESS

LANXESS Corporation

111 RIDC Park West Drive • Pittsburgh, PA 15275-1112

DIRECTIONS FOR USE

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

Labeling directions, precautionary statements and restrictions for any other product recommended must be followed.

FOR DETAILED DIRECTIONS FOR USE, PLEASE REFER TO THE LANXESS CORPORATION TECHNICAL INFORMATION SHEET. Read these entire Directions before using Preventol A8 Preservative.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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 the 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: Do not use container in connection with food, feed, or drinking water. Completely empty container into the processing equipment. Then dispose of empty container in a sanitary landfill, by incineration or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

When the water-soluble bags have been removed, dispose of corrugated box in a sanitary landfill, by incineration or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

RESTRICTIONS: Do not package Preventol A8 Preservative in metal containers.

* Preventol is a registered trademark of LANXESS Corporation.

INTERNATIONAL 703-527-3887

Net Contents:

Lot No.:

NOTIFICATION

Date Reviewed: 10-1-07
Reviewed By: *Alford*

LABEL TEXT DATE: DRAFT

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NOTIFICATION
Date Reviewed: 10-1-07
Reviewed By: A. E. J. W. M. C. P.

LANXESS

Energizing Chemistry

Product Information

Preventol A8 Preservative FUNGICIDE

EPA Registration Number 39967-13
CAS Number [107534-96-3]

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FOR THE PRESERVATION OF WOOD-BASED COMPOSITE PRODUCTS, WOOD PRODUCTS INTENDED FOR ABOVE GROUND AND IN-GROUND CONTACT, PLASTICS, COATINGS AND PAINT SYSTEMS FOR IN-FILM PRESERVATION, GLUES, ADHESIVES, SEALANTS, AND METALWORKING FLUIDS AGAINST BIODETERIORATION

Chemical and Physical Data

Common Name:	Tebuconazole	
Chemical Name:	α -[2-(4-Chlorophenyl)ethyl]- α -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol	
Minimum Purity:	min. 93%	
Nominal Concentration:	97%	
Density (20°C):	1.25	
Bulk Density:	approx. 400 kg/m ³	
Vapor Pressure (60°C):	approx. 6 x 10 ⁻⁶ hPa (pure active ingredient)	
Melting Point:	approx. 103°C	
Flash Point:	> 185°C	
Ignition Temperature:	approx. 468°C	
Solubility of Active Ingredient in % by Weight (20°C):	water	approx. 32 ppm
	ethyl glycol	approx. 27.0%
	propylene glycol monomethyl ether	approx. 25.5%
	dipropylene glycol monomethyl ether	approx. 21.5%
	Solvesso 100	approx. 2.9%
	Kristalloel 60	approx. 0.3%
	white spirit*	approx. 0.3%
	*(aromatic content 30% - calculated as xylene)	

Stability

Preventol A8 Preservative is resistant to hydrolysis in acidic up to strong alkaline formulations. Reaction in water: neutral.

Storage

If correctly stored and kept in original sealed container, the shelf life of Preventol A8 Preservative is 1 year.

Applications

Preventol A8 Preservative has a broad spectrum of activity and is particularly effective against wood-rotting Basidiomycetes strains. Preventol A8 Preservative is practically unleachable, light-stable, heat-stable and non-volatile and therefore suitable for long-term protection. It is suitable for use in solvent-based and aqueous wood preservatives. The active ingredient is compatible with the binders, pigments, dryers and auxiliaries normally used in wood preservatives as well as with a variety of blue stain fungicides in solvent based wood preservatives and with insecticides such as Cyfluthrin or permethrin.

Preventol A8 Preservative is also suitable, due to the above described properties, to protect plastics, coatings and paint systems, glues and adhesives as well as metalworking fluids against infestation by fungal organisms.

Spectrum of Activity

Preventol A8 Preservative has a broad spectrum of activity against wood-rotting fungi. Toxic values are determined in accordance with the relevant internationally recognized standards. The values obtained from samples which have been aged artificially - for example evaporative aging as specified in EN 73 or leaching as specified in EN 84 - are not substantially higher than the levels recorded in samples which have not been aged.

Toxic values (kg/m³) determined in accordance with EN 113

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Test institute BAM ¹ 1990, scots pine sapwood			Test institute BRE ² 1990/1993, scots pine sapwood		
Test fungus	unaged	after evaporative aging (EN 73)	unaged	after evaporative aging (EN 73)	after leaching (EN 84)
Coniophora puteana	0.030 - 0.050	0.070 - 0.110	0.052 ³	0.053 ³	0.054 ³
Gloeophyllum trabeum	0.012 - 0.030	0.045	0.051 ³	0.050 ³	0.051 ³
Poria placenta	0.120 - 0.180	0.280 - 0.440	0.012 - 0.153	0.150 - 0.310	0.099 - 0.152
Coriolus versicolor	test not conducted	test not conducted	0.151 - 0.299	0.155 - 0.306	0.101 - 0.150
1 BAM = Federal Office for Material Research and Testing, Berlin, Germany					
2 BRE = Building Research Establishment Timber Division, Biodeterioration Section, Garston, UK					
3 no failing concentration determined					

Soil block test AWPA E10-91 carried out by test institute MSFPL⁶

Test fungus	Wood species	Weathering	Toxic values (kg/m ³)
Coriolus versicolor	Sweetgum	without	≤ 0.540 ⁷
		with	≤ 0.546 ⁷
Irpex lacteus	Sweetgum	without	0.018 - 0.019
		with	0.019 - 0.021
Gloeophyllum trabeum	Ponderosa pine	without	0.018 - 0.0193
		with	0.026 - 0.030
Poria placenta	Ponderosa pine	without	0.117 - 0.123
		with	0.138 - 0.144
6 MSFPL = Mississippi State Forest Products Laboratory, Mississippi State, USA			
7 no weight loss even at lowest retention of tebuconazole used; no toxic value calculated			

Soil block test ASTM D 1413 carried out by test institute MTU⁸

Retention of tebuconazole (kg/m ³ wood)	0.12	0.24	0.48	0.96
Test fungus	weight loss of the test blocks			
Coriolus versicolor (birch)	> 50	> 50	13.9	0.9
Gloeophyllum trabeum ⁹ (southern pine)	0.2	1.6	0.2	1
8 MTU = Michigan Technological University, Institute of Wood Research, Houghton, USA				
9 no weight loss even at lowest retention of tebuconazole used; no toxic value calculated				

In addition, the product was tested for fungicidal effectiveness in accordance with the German quality and test regulations (*Güte und Prüfbestimmungen*) for the award of the RAL-quality mark for wood preservatives (RAL-GZ-830).

The results show that Preventol A8 Preservative applied in quantities of 1.3 g/m² or more is sufficient to protect the wood against decay.

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INFORMATION ABOUT SAFETY AND HANDLING AND ON ECOLOGICAL AND TOXICOLOGICAL BEHAVIOR IS GIVEN IN OUR MATERIAL SAFETY DATA SHEET AND IN OUR SUMMARY OF TOXICITY AND ECOTOXICITY.

DIRECTIONS FOR USE

IMPORTANT: Labeling directions, precautionary statements and restrictions for all other products recommended in this bulletin must be followed.

Wood-based Composite Products

GENERAL: Preventol A8 Preservative is recommended to preserve wood-based composite products, such as waferboard, fiberboard, particleboard, plywood and oriented-strand board to prevent the growth of mildew, blue stain and wood destroying fungi on the composite product. These composites are used in the following applications: millwork, including door and window frames; exterior siding; construction lumber; and exterior wood. Composite wood treated with Preventol A8 Preservative does not change in appearance and may be painted when dry.

Preventol A8 Preservative may be applied into a wood composite through a number of methods, including:

- a) Metering Preventol A8 Preservative onto the dried wood flakes, fibers, etc. immediately before the blender. The Preventol A8 Preservative is then mixed with flakes in the blender.
- b) Mixing Preventol A8 Preservative with the wood flakes in the blender.
- c) Mixing Preventol A8 Preservative with the adhesive or wax which is subsequently applied to the flakes in the blender.

The method of incorporation of Preventol A8 Preservative will depend on the specific manufacturing process and wood species used for the composite.

The suggested use level is 0.01 to 0.03 lbs. Preventol A8 Preservative per cubic foot of wood, or 0.025 to 0.075% Preventol A8 Preservative, based on dry board weight.

ALL OF THE ABOVE USES ARE NON-SOIL CONTACT NON-FUMIGATION TREATMENTS

Wood Products Intended for Above Ground and In-Ground Contact

GENERAL: Preventol A8 Preservative is recommended for the preservation of wood intended for above-ground and/or in-ground contact, such as Ponderosa pine, Scots pine, Southern yellow pine, beech, oak, birch, and other wood species susceptible to decay by rotting fungi. Such uses include railway sleepers, fence posts, poles, horticultural posts, etc. Wood preserved with Preventol A8 Preservative alone does not change in appearance and may be painted when dry.

Preventol A8 Preservative may be applied to wood by dissolving in a suitable solvent and adding auxiliaries such as: water and/or organic solvents, emulsifiers, fixating agents, paraffin wax or resins, additional active ingredients (to protect against fungi and/or insects, including termites), dyestuffs, pigments, penetration improvers and other auxiliaries.

The method of incorporation of Preventol A8 Preservative will depend on the specific treating process and wood species to be treated and intended use of the treated wood.

Preventol A8 Preservative may be applied by dip, double vacuum or pressure treatment methods. Solution uptake and treatment conditions for each method should result in a 0.003 to 0.05 pcf (lbs/ft³) retention of active ingredient in the treated article. Wood for in-ground contact generally needs the highest treatment retention.

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Dip: For dip treatment, wood should be used only for above-ground uses that are continually protected from direct exposure to weather. Immerse wood completely until enough solution has been absorbed to meet the retention requirements given above. Use dip treatment procedures consistent with the equipment being used and standard treatment practices. In general, an immersion time of 3 minutes in a 0.5% solution of Preventol A8 Preservative will be sufficient.

Double Vacuum: For double vacuum treatment, stack the wood in the treatment vessel so that it will remain submerged. In general, a treating solution concentration of 0.5% of Preventol A8 Preservative will be sufficient. Pull vacuum of -10 inches for five minutes. Fill the vessel, allow the pressure to return to atmospheric and discharge preservative solution. Pull a vacuum of -20 inches and maintain for twenty minutes. Return to atmospheric pressure and drain preservative.

Pressure Treatment: For pressure treatment follow the general requirements of the American Wood Preservers Association Standard C-1.

The suggested use level is 0.003 - 0.03 lbs. Preventol A8 Preservative per cubic foot of wood.

ALL OF THE ABOVE USES ARE NON-FUMIGATION TREATMENTS

Plastics Preservation

GENERAL: Preventol A8 Preservative is recommended for use as a fungicide (mildewcide) in PVC, polyurethane, and other polymers used for the production of shower curtains, tarpaulins, sun umbrellas and other plastics products.

Preventol A8 Preservative should be used at an application rate of 0.3 - 1.2% of Preventol A8 Preservative based on the weight of the finished formulation. To insure uniform distribution in the end product it is recommended that Preventol A8 Preservative be pre-blended with plasticizer or other liquid ingredient of the finished formulation before the final production step. The treatment is recommended up to a temperature of 350°F and is limited only by decomposition of the substance.

Other use recommendations include the following: the maximum level of protection is achieved if Preventol A8 Preservative is combined with a second fungicide, e.g. N-octyl isothiazolinone. Recommended concentrations for a combination of Preventol A8 Preservative and this active substance are in the ratio 2:1 - 4:1 (in plastics this calculates as 0.3 - 0.8% active ingredient).

Coatings and Paint Systems

GENERAL: Preventol A8 Preservative is effective against a wide variety of mold fungi for the preservation of coating films. The exact concentration of Preventol A8 Preservative will vary with the composition of the coating to be protected and with the risk of infestation. To reach optimum effectiveness, preliminary testing with the ranges provided below is recommended to determine the most appropriate amount of Preventol A8 Preservative to be used.

Preventol A8 Preservative can be ground together with the pigments, or can be pre-dissolved in a suitable solvent and added at the end of the manufacturing cycle. In both cases, Preventol A8 Preservative should be distributed homogeneously in the coatings to be protected.

Recommended concentration of Preventol A8 Preservative in emulsion paints for exterior use:

- 1.0 - 2.0% (calculated on total solid content)

To achieve the maximum level of protection, Preventol A8 Preservative can be combined with other mildewcides such as 3-iodo-2-propinylbutyl carbamate [IPBC], or N-octylisothiazolinone.

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Recommended concentration for a combination of Preventol A8 Preservative and 3-iodo-2-propinylbutyl carbamate [IPBC] (2:1) in emulsion paints for exterior use:

- 0.3 - 0.8% of the combination (calculated on total solid content)

Recommended concentration for a combination of Preventol A8 Preservative and N-octylisothiazolinone (2:1) in emulsion paints for exterior use:

- 0.3 - 0.8% of the combination (calculated on total solid content)

Recommended concentration of Preventol A8 Preservative in coatings for paper and paperboard (paper coatings for indoor, non-food contact uses):

- 0.1 - 2.0% (calculated on coating applied to paper/paperboard)

Glues and Adhesives

GENERAL: Preventol A8 Preservative can be used as an additive to glues and adhesive formulations to prevent infestation by a wide variety of fungal organisms. With the use of Preventol A8 Preservative, it is possible to protect both the post-application, wet stage and the dry film of such products against fungal attack. A long-lasting effect is secured, as Preventol A8 Preservative is practically non-volatile and insoluble in water.

Recommended uses include, but are not limited to the following:

- casein containing adhesives, such as that used for labeling and books;
- starch-based glues typically used in wallpaper;
- dextrin adhesives;
- synthetic polymer-based adhesives, such as acrylic, styrene butadiene, and polyvinyl alcohol; and
- animal glues, such as bone, skin and gelatin-based glues

Recommended levels are 0.75 - 2.0% active ingredient based on the total weight of product to be protected. The powdered preservative should be mixed thoroughly with the glue powder. Additions depend on the composition of the glue, the conditions in which it is to be used, and the degree of protection required. Preventol A8 Preservative can also be added to liquid formulations, however, good stirring is required to achieve even distribution throughout the adhesive formulation. Also, Preventol A8 Preservative may be dissolved in suitable solvents prior to addition to the adhesive formulation. To reach optimum effectiveness, preliminary testing with the ranges provided is recommended to determine the most appropriate amount of Preventol A8 Preservative to be used.

Enhanced protection is achieved if Preventol A8 Preservative is combined with a second mildewcide, e.g. 3-iodo-2-propinylbutyl carbamate [IPBC], or N-octyl isothiazolinone.

Recommended concentration for a combination of Preventol A8 Preservative and 3-iodo-2-propinylbutyl carbamate [IPBC] (2:1) in glues and adhesives for fungicidal protection:

- 0.3 - 0.8% of the combination (calculated on total formula weight)

Recommended concentration for a combination of Preventol A8 Preservative and N-octylisothiazolinone (2:1) in glues and adhesives for fungicidal protection:

- 0.3 - 0.8% of the combination (calculated on total formula weight)

Note: Adhesives formulated for food packaging applications may require approval by the Food and Drug Administration.

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Sealants

Preventol A8 should be incorporated into the sealant formulation to inhibit any microbial growth on the sealant. Preventol A8 is practically non volatile and insoluble in water.

Recommended levels are 0.25 - 1% active ingredient based on the total weight of product to be protected. Additions depend on the composition of the sealant, the conditions in which it is to be used, and the degree of protection required. The powdered preservative should be mixed thoroughly with the sealant formulation or pre-blended with a compatible component of the formulation. It is also possible to add Preventol A8 to liquid formulations.

Metalworking/Cutting Fluids

Preventol A8 Preservative may be used in aqueous-based metalworking, cutting cooling and lubricating fluids to prevent fungal growth. It can be incorporated into the original concentrate of metalworking fluids by adding the preservative under stirring until the preservative is completely dissolved. Depending on the metalworking fluid type, it may be advantageous to pre-dissolve Preventol A8 Preservative in a suitable solvent. Lab trials to check the compatibility of the fluid to be preserved with the preservative are strongly recommended. Preventol A8 Preservative should be added to the metalworking fluid concentrate in amounts sufficient to yield the desired concentration of active ingredient in the diluted composition. If Preventol A8 Preservative is to be added directly to the diluted metalworking fluid, it should first be dissolved in a suitable solvent. For a homogeneous mixture of substrate and preservative, add the preservative at a point in the system where good circulation is assured. Preventol A8 Preservative prevents growth of mold-fungi. If supplementary protection against bacterial growth is required, LANXESS Corporation recommends combination with a suitable bactericide.

Recommended Concentrations:

Metalworking fluids - Mineral Oil Based

Metalworking fluids (concentrates): 2.0 - 4.0%
Metalworking fluids (ready to use): 0.1 - 0.2%

Metalworking fluids - Non-Mineral Oil Based

Metalworking fluids (concentrates): 2.0 - 4.0%
Metalworking fluids (ready to use): 0.1 - 0.2%

LANXESS Corporation
111 RIDC Park West Drive
Pittsburgh, PA 15275
412-809-1000

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