

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 10 1998

Stan Oslosky
Bayer Corporation
100 Bayer Road
Pittsburgh, PA 15205-9741

Dear Mr. Oslosky:

Subject: Add in-ground contact for wood products
Preventol A8 Technical Fungicide N-107
EPA Registration No. 39967-10
Your resubmission of January 9, 1998

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable provided that you make the labeling changes indicated below prior to release for shipment of product bearing the amended labeling.

1. Revise the use directions to read:

“Formulators are responsible for obtaining their own EPA Registration No. and developing the data required to support their registrations. Preventol A8 Technical Fungicide is intended for formulation of the following uses:

2. The correct EPA Registration No. for this product is 39967-10.

Submit two copies of your final printed labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

Adam Heyward
for Adam Heyward
Product Manager (34)
Regulatory Management Branch II
Antimicrobials Division (7510W)

CONCURRENCES								
SYMBOL	Enclosure							
SURNAME								
DATE								

Reason for Issue: In response to EPA fax of 7/18/97
Date of Draft: January 9, 1998

EPA Registration No: 39967-10
Information below line to be printed as a single panel.

U.S. LABEL

PREVENTOL A8 TECHNICAL FUNGICIDE

N-107

FOR USE IN THE MANUFACTURE OF FUNGICIDES IN AQUEOUS AND SOLVENT SYSTEMS TO PROTECT WOOD COMPOSITE PRODUCTS, WOOD PRODUCTS INTENDED FOR ABOVE GROUND AND IN-GROUND CONTACT, PLASTICS, COATINGS AND PAINT SYSTEMS FOR IN-FILM PRESERVATION, GLUES AND ADHESIVES, AND METALWORKING/CUTTING FLUIDS AGAINST BIODETERIORATION

ACTIVE INGREDIENT: TEBUCONAZOLE, α -[2-(4-Chlorophenyl)ethyl]- α -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol.....93%
INERT INGREDIENTS:.....7%
100%

WARNING!
KEEP OUT OF THE REACH OF CHILDREN

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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.

STATEMENTS OF PRACTICAL TREATMENT

If eyes are contaminated, flush eyes with plenty of water. Call a physician if irritation occurs. If on skin, wash skin immediately with soap and warm water. If irritation occurs, get medical attention. If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention. If swallowed, administer water freely and induce vomiting by giving one dose (1/2oz or 15ml) of syrup of ipecac. If vomiting does not occur within 5 to 10 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear.

Never give anything by mouth to an unconscious person. Get medical attention immediately.

In case of poisoning: call a physician or Poison Control Center. Have patient lie down and keep quiet.

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

DIRECTIONS FOR USE

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

FOR DETAILED DIRECTIONS FOR USE, PLEASE REFER TO THE BAYER CORPORATION TECHNICAL INFORMATION SHEET NUMBER N-107

Important: Read these entire Directions before using Preventol A8.

Labeling for products formulated from this product must conform to that which is currently registered with the U.S. Environmental Protection Agency. For specific information on federally registered uses, contact Bayer Corporation. Any variance from the federally registered labeling for products containing Preventol A8 will have to be supported by data provided by the formulator.

Preventol A8 Technical Fungicide is intended for formulation in to end-use products for:

Millwork: Window frames, wood doors, door frames, etc.

Wood Stains (Preservative Incorporation): Wood siding, lumber, plywood, particleboard, wood decks, wood furniture, (outdoors).

In-Ground Contact Uses: Wood products for in-ground uses (pilings, telephone poles, wood building materials, etc.).

Sapstain Control: Fresh-cut lumber.

Industrial Preservative Uses: Plastics, coatings and paint systems, glues and adhesives, metalworking fluids.

NOTE TO USER: For worker protection during mixing, loading and during application, wear a hat, long sleeve 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.

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, 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: 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 or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep the material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed above. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer Corporation Pittsburgh Emergency Response Team for decontamination procedures any other assistance that may be necessary. The Bayer Corporation Pittsburgh Emergency Response Telephone Number is 412/923-1800, or contact CHEMTREC at 800/424-9300.

RESTRICTIONS: Do not package Preventol A8 in metal containers.

DISCLAIMER. Seller (whether Manufacturer, Distributor or other) makes no warranty express or implied, including the implied warranty of merchantability, regarding this product except the composition as set forth in the ingredient statement herein, and shall not be liable for special or consequential damages, the exclusive remedy being replacement of the product. Buyer or user assumes all risk of possession, handling or use of this material when such use and/or handling is contrary to label instructions.

Bayer Corporation
Industrial Chemicals Division
100 Bayer Road
Pittsburgh, PA 15205-9741

EPA REG. NO. 39967-10
EPA ESTABLISHMENT NUMBER 3125-MO-1

NET CONTENTS:

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide.
39967-10

ACCEPTED
with COMMENTS
in EPA Letter Dated:
MAR 10 1998

2025

U.S. PRODUCT INFORMATION

TO BE PRINTED AS SEVERAL PAGES

Reason for Issue: To respond to EPA fax of 7/18/97

EPA Registration No: 39967-10

Date of Draft: December 14, 1997

Product Information

Preventol A8
TECHNICAL FUNGICIDE

N-107

FOR USE IN THE MANUFACTURE OF FUNGICIDES IN AQUEOUS AND SOLVENT SYSTEMS TO PROTECT WOOD COMPOSITE PRODUCTS INTENDED FOR ABOVE GROUND AND IN-GROUND CONTACT, PLASTICS, COATINGS AND PAINT SYSTEMS FOR IN-FILM PRESERVATION, GLUES AND ADHESIVES AND METALWORKING/CUTTING FLUIDS AGAINST BIODETERIORATION

Bayer Product Code/Technical Information Sheet No. N-107
EPA Registration Number 39967-10
CAS Number [107534-96-3]

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%
Density (20°C): 1.25
Bulk Density: approx. 400 kg/m³
Vapor Pressure (60°C): approx. 6 x 10⁻⁶hPa (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)

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Stability

Preventol A8 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 is 1 year.

Applications

Preventol A8 has a broad spectrum of activity and is particularly effective against wood-rotting Basidiomycetes strains. Preventol A8 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 and with insecticides such as Cyfluthrin or permethrin.

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

Spectrum of Activity

Preventol A8 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

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)
Coniphora 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 falling 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			

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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 calculates				

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 0.6% or more Preventol A8 in solvent-based and water-based wood preserving primers and stains applied in quantities of 210 ml/m² is sufficient to protect the wood against decay. Products formulated for wood protection must be registered in accordance with EPA requirements.

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.

SUGGESTED USES

Wood-based Composite Products

GENERAL: Preventol A8 is recommended for the formulation of preservatives intended for use in 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 does not change in appearance and may be painted when dry.

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

Wood Products Intended for In-Ground and Out of Ground Contact

GENERAL: Preventol A8 is recommended for the formulation of preservatives for use in 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.

Preventol A8 may be applied to wood through a wood preservative formulation based on: water and/or organic solvents, emulsifiers, fixating agents like wax, additional active ingredients (to protect against fungi and/or insects, including termites), dyestuffs, pigments and penetration improvers.

The method of incorporation of Preventol A8 will depend on the specific preservative formulation, specific treating process and wood species to be treated. Formulations for application by dip, double vacuum or pressure treatment methods are possible.

ALL OF THE ABOVE USES ARE NON-FUMIGATION TREATMENTS

Plastics Preservation

GENERAL: Preventol A8 is recommended for the formulation of preservatives intended for use in PVC, polyurethane, and other polymers used for the production of shower curtains, tarpaulins, sun umbrellas and other plastics products.

Coatings and Paint Systems

GENERAL: Preventol A8 can be used for the formulation of preservatives intended for the preservation of coating films. The exact concentration of Preventol A8 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 to be used.

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 can be combined with other mildewcides such as, 3-iodo-2-propinylbutyl carbamate [IPBC], or N-octylisothiazolinone.

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)

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Glues and Adhesives

GENERAL: Preventol A8 can be used for the formulation of preservatives intended for use in glues and adhesive formulations to prevent infestation by a wide variety of fungal organisms. With the use of Preventol A8, 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 is practically non-volatile and insoluble in water.

Recommended use 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

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

Metalworking/Cutting Fluids

Preventol A8 can be used for the formulation of preservatives intended for use in metalworking/cutting fluids to prevent infestation by fungal organisms. Preventol A8 formulations will prevent fungal growth in aqueous-based metalworking, cutting cooling and lubricating fluids. Preventol A8 formulations prevent growth of mold-fungi. If supplementary protection against bacterial growth is required, Bayer Corporation recommends combination with a suitable bactericide.

Recommended Concentrations based on amount of Preventol A8 in formulation:

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%

Bayer Corporation
Organic Chemicals Department
Industrial Chemicals Division
100 Bayer Road
Pittsburgh, PA 15205-9741

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety and environmental standpoint. Such testing has not necessarily been done by Bayer Corporation. All information is given without warranty or guarantee. It is expressly understood and agreed that the customer assumes and hereby expressly releases Bayer from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind Bayer. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

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