

DEC 23 1999

Albright and Wilson UK Limited
210-222 Hagley Rd. West, Oldbury, Warley
West Midlands, UK B68 ONN
Glen Allen, VA 23058-4439

Attention: Elliot Harrison, Agent

Subject: Tolcide PS352C
EPA Registration No. 33677-5
Submission Dated September 17, 1999

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(B), is being accepted on a 2-year time limited basis. The registration for the use of this product in the manufacture of food contact paper and paperboard expires on December 23, 2001. In order for the registration of this use to continue the conditions listed below must be satisfied.

1. The following data must be submitted by to the Agency by December 23, 2000.
 - a. A Two Generation Reproduction Study, in rats.
 - b. A Residue Migration Study must be submitted using the FDA guidance document and the appropriate food simulating solvents. This study should be conducted using the "wet end" procedure for making paper and paper board using a validated analytical method. You may want to meet with EPA prior to conducting the study.
2. Submit and/or cite all data required for the registration/reregistration of your product under FIFRA sec. 3(c)(5) and sec. 4 when the Agency requires all registrants of similar product to submit such data.
3. Submit 2 copies of final printed labeling before you release the product for shipment.

This registration for this use automatically expires on December 23, 2001. In order for the registration of the use of this product to manufacture food contact paper and paperboard to continue, the data described in item 1 above must be submitted, reviewed, and found acceptable. In addition, the Agency must make a determination under FIFRA section 2(bb)(2) that this use will not result in unreasonable adverse effects. If the Agency is unable to make this determination, then the registration of the food contact paper and paperboard use will expire.

A stamped copy of the labeling is enclosed for your records. A copy of EPA's science reviews supporting the conditional acceptance of this new use pattern is also attached for your records.

If you have any questions concerning this letter please contact Marshall Swindell at (703) 308-6341.

Sincerely,



Marshall Swindell
Product Manager 33
Regulatory Management Branch 1
Antimicrobials Division (7510C)

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TOLCIDE® PS352C

INDUSTRIAL ANTIMICROBIAL

ACTIVE INGREDIENT:	
Tetrakis(hydroxymethyl) phosphonium sulfate.....	35%
INERT INGREDIENTS:.....	
TOTAL:.....	65%
	100%

EPA Reg. No. 33677-5

EPA Est. 550-TX-2

KEEP OUT OF REACH OF CHILDREN DANGER

ACCEPTED
with COMMENTS
in EPA Letter Dated:

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STATEMENT OF PRACTICAL TREATMENT

If in eyes: Flush immediately with large amounts of clean, cool water for at least 15 minutes. Get medical attention immediately.
If swallowed: Promptly drink large quantities of water. Do not induce vomiting. Avoid alcohol. Call a physician immediately.
If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.
If on skin: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. Get medical attention.
Prolonged or frequent skin contact may cause allergic reactions in some individuals.
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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

33677-5

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if inhaled. Avoid breathing vapor. Remove contaminated clothing and wash before reuse. Harmful or fatal if swallowed. Avoid contamination of food.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. 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.

STORAGE AND DISPOSAL

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

STORAGE: Store this product in a cool, dry area away from direct sunlight and heat to avoid deterioration. In case of a spill, flood the area with large quantities of water.

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) all containers and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or other procedures approved by state and local authorities.

Note: Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk and/or handling of this material, when such use and/or handling is contrary to label directions.

In case of emergency, call CHEMTREC at 1-800-424-9300

Manufactured by:

**ALBRIGHT
& WILSON**

ALBRIGHT & WILSON UK LIMITED

210-222 Hagley Road West • Oldbury, Warley • West Midlands • United Kingdom B68 0NN

Product of the United Kingdom

DIRECTIONS FOR USE

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

PAPER MANUFACTURING (for control of bacteria, fungi and algae)

a) For use as a slimicide in the manufacture of paper and paperboard products and adhesives that do not contact food.

Dosing: Additions should be made at a point in the system where mixing action is good, e.g. raw stock chest beater or mixing unit.

Add intermittently or continuously depending on mill conditions.

Intermittent Dosing: Add 70-1000 ppm of TOLCIDE PS352C (24.5-350 ppm THPS) based on total water volume or an equivalent based on dry weight of paper produced.

Continuous Dosing: Add 40-140 ppm of TOLCIDE PS352C (14-49 ppm THPS) based on total water volume or an equivalent based on dry weight of paper produced.

b) For use as a slimicide in the manufacture of paper and paperboard products that may contact food.

Dosing: Additions should be made at a point in the system where mixing action is good, e.g. raw stock chest beater or mixing unit.

Add intermittently or continuously depending on mill conditions.

Intermittent Dosing: Add 70-240 ppm of TOLCIDE PS352C (24.5-84 ppm THPS) to slurry water or to process water which is added to slurry or process water. The maximum use concentration of THPS in the slurry cannot exceed 84 ppm.

Continuous Dosing: Add 40-140 ppm of TOLCIDE PS352C (14-49 ppm THPS) to slurry water or to process water which is added to slurry or process water. The maximum use concentration of THPS in the slurry cannot exceed 84 ppm.

c) For use as a preservative for Alkyl Ketene Dimer (AKD) Emulsions

This product can be used to prevent bacterial and fungal contamination of AKD emulsions that are applied to food-contact paper and paperboard at the dry end of the paper machine.

Dosing: Apply from 500-1420 ppm of TOLCIDE PS 352C (175-497 ppm THPS) to the AKD emulsion to be preserved.

INDUSTRIAL AND/OR COMMERCIAL RECIRCULATING COOLING WATER SYSTEMS (for control of bacteria, fungi and algae)

Initial Slug Dose: Add 200-750 ppm of TOLCIDE PS352C (70-262.5 ppm THPS) based on total water volume. Repeat until control is obtained. Thereafter, add either **intermittently** 75-300 ppm of TOLCIDE PS352C (26-105 ppm THPS) or **Continuously** 40-140 ppm of TOLCIDE PS352C (14-49 ppm THPS) per day. Dirty systems must be cleaned prior to treatment.

HEAT TRANSFER SYSTEMS (Evaporative Condensers, Dairy Sweetwater Systems, Hydrostatic Sterilizers and Retorts, Brewery and Other Pasteurizers, and Warmers)

Add TOLCIDE PS352C at the same application rates, and in the same manner as described above. It should be added to the system at a point of uniform mixing such as a basin area, sump area, or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

SOLUTIONS / EMULSIONS

Not for use in manufacture of paper and paperboard products and adhesives that may come in contact with food. For the preservation of solutions, emulsions, adhesives and other aqueous liquid products, the addition of 0.05% to 0.5% of TOLCIDE PS352C (0.0175-0.175% THPS) is effective. Add at a point in the processing system where there will be sufficient time and agitation for good mixing and dispersion. The exact amount of TOLCIDE PS352C to be added for the preservation of given formulations will depend on the components as well as local storage time and requirements.

OIL FIELD OPERATIONS

TOLCIDE PS352C is effective in controlling sulfate reducing bacteria and general aerobic bacteria, including microorganisms that contribute to biofilm formation in oil field recovery, processing and distribution applications and supporting systems such as injection water, water holding tanks, disposal well water, recirculating water handling systems, and pipelines. TOLCIDE PS352C has been shown to dissolve iron sulfide and sequester iron when used under these conditions, leading to improved filter life and well injectivity, and reduction of hydrocarbon sheen. TOLCIDE PS352C is also effective for use in controlling microbial growth in fluids used for drilling and stimulation of oil wells.

Water Floods

Tolcide PS352C should be added to a water flood system at a point where uniform mixing will occur.

Initial Treatment: For a noticeably fouled system, add 200-750 ppm TOLCIDE PS352C (70-262.5 ppm THPS). When added to a flowing system, slug dose for 2-6 hours based on flow rates. Repeat as necessary until control is achieved.

Subsequent Treatment: Once control has been achieved, add 30-210 ppm TOLCIDE PS352C (10.5 - 73.5 ppm THPS) weekly or as needed to maintain control. When added to a flowing system, slug dose for 2-6 hours based on flow rates.

Continuous Treatment: TOLCIDE PS352C can be dosed continuously at a level of 30-143 ppm (10.5-50 ppm THPS).

Oil and Gas Pipelines

TOLCIDE PS352C should be added at a point in the pipeline where uniform mixing will occur.

Slug Dosing: Follow instructions for water flood treatment.

Continuous Dosing: TOLCIDE PS352C can be dosed continuously at a level of 30-215 ppm (10.5-75 ppm THPS).

Drilling Muds, Packer Fluids, Completion and Workover Fluids

TOLCIDE PS352C should be added to these fluids at a point where uniform mixing will occur. Add 70-3000 ppm of TOLCIDE PS352C (24.5-1050 ppm THPS) to a freshly prepared fluid depending on severity of contamination.

TOLCIDE® is a registered trademark of Albright & Wilson UK Limited.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

DEC 23 1999

31P-1298

NET CONTENTS: As Marked on Container

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No.
236-77-5