

JUL -7 2004

Rhodia Inc.  
 259 Prospect Plains Road  
 Cranbury, N. J. 08512

Attention: Paul R. Larson  
 Product Stewardship Manager

Subject: Tolcide PS355A  
 EPA Registration No. 33677-6  
 Amendment Dated March 19, 2004

The amendment, submitted in connection with registration under the FIFRA sec. 3(c)(7)(A), to include additional Use Sites on existing approved use patterns, is acceptable, provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec.3(c)(5) and sec. 4 when the Agency requires all registrants of similar products to submit such data.
2. Submit two (2) copies of final printed labeling before you release the product for shipment.

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.

A stamped copy of the "accepted" labeling is enclosed for your records.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,



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

Enclosure		CONCURRENCES					
SYMBOL							
SURNAME							
DATE							

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# TOLCIDE® PS355A

## INDUSTRIAL ANTIMICROBIAL

**ACTIVE INGREDIENT:**

Tetrakis(hydroxymethyl) phosphonium sulfate.....

**OTHER INGREDIENTS:**.....**TOTAL:** .....

35%

65%

100%

EPA Reg. No. 33677-6

EPA Est. 550-TX-2

EPA Est. 80347-TX-1

**KEEP OUT OF REACH OF CHILDREN****DANGER**

FIRST AID	
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li><li>• Call a poison control center for further treatment advice.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>Note to physician:</b> Probable mucosal damage may contraindicate the use of gastric lavage.	

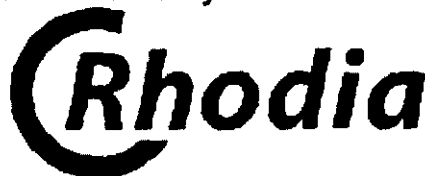
In case of emergency, call CHEMTREC at 1-800-424-9300.

**Manufactured By:**ACCEPTED  
with COMMENTS  
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RHODIA CONSUMER SPECIALTIES LIMITED

Trinity Street • Oldbury

West Midlands • United Kingdom B69 4WD

Product of the United Kingdom

**NET CONTENTS:** As Marked on Container

[Box and bullet format for FIRST AID section is optional.]

## 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 long-sleeved shirt and pants or coveralls, goggles or face shield and chemical-resistant gloves when handling. Prolonged or frequent skin contact may cause allergic reactions in some individuals. Harmful if inhaled. Avoid breathing vapor. Harmful or fatal if swallowed. Avoid contamination of food. Remove contaminated clothing and wash before reuse.

For cooling water systems of equal to or greater than 4000 gallons, do not apply by open pouring of liquid to cooling water systems; a metering pump delivery system is required for this use and application method.

## 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.

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**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.

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Fungicide, and Rodenticide Act as  
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## DIRECTIONS FOR USE

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

### **PAPER AND PAPERBOARD MANUFACTURING (for control of bacteria, fungi and algae)**

~~Not for use in manufacture of paper and paperboard products and adhesives that may come in contact with food.~~

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® PS355A (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® PS355A (14-49 ppm THPS) based on total water volume or an equivalent based on dry weight of paper produced.

b) For use as a preservative to retard microbial growth in water-based coatings, starches, pigments and filler slurries. Do not use in paper and paperboard and adhesives that will contact food.

The treatment rate necessary to retard spoilage of the additive will vary with the extent of contamination of make-up water and the length of storage.

**Dosing:** Apply from 500-1430 ppm of TOLCIDE® PS355A (175-500 ppm THPS) to the additive to be preserved based on the total weight of the additive and water.

### **INDUSTRIAL FRESH WATER SYSTEMS**

TOLCIDE® PS355A is effective in controlling algae in holding ponds and in controlling bacteria and fungi in holding and processing tanks of industrial fresh water systems supplying water to pulp and paper mills, textile mills, and other manufacturing plants. In pulp and paper mills, treatment of the fresh water with TOLCIDE® PS355A can make an important contribution to slime control. The use of TOLCIDE® PS355A as described will reduce the development of slime in fresh water pipes and other equipment, and on the pulp and paper mill machine parts contacted by fresh water. Not for use in manufacture of paper and paperboard products and adhesives that may come in contact with food.

For the control of algae in industrial fresh water systems, TOLCIDE® PS355A should be added to provide a concentration of 3-30 ppm of product (1-10 ppm THPS). Treatment should be based on the amount of water entering a pond or reservoir or leaving the pond or reservoir and entering the immediate processing operations. While treatment can be made continuously, regular slug-dosing treatment will provide adequate control.

### **INDUSTRIAL WASTEWATER SYSTEMS (Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks)**

TOLCIDE® PS355A should be added to a wastewater system or sludge at a convenient point of uniform mixing such as digester. Add 715-3570 ppm of TOLCIDE® PS355A (250-1250 ppm THPS) per 1,000 gallons of wastewater or sludge.

### **MACROFOULING CONTROL**

TOLCIDE® PS355A should be added continuously to maintain a level of 20 ppm active ingredient (THPS) in the system for a period of at least 96 hours.

Initial Dose: When macrofouling is present in the system, apply 57 ppm of TOLCIDE® PS355A (20 ppm THPS) based on total water volume. Continue to add TOLCIDE® PS355A as needed to maintain the 20 ppm active ingredient (THPS) level for a period of at least 96 hours.

### **FIRE PROTECTION SYSTEMS**

TOLCIDE® PS355A is effective at controlling microbial growth in waters and on pipe surfaces in fire protection systems. Such microbial growth when combined with other forms of corrosion can lead to accelerated corrosion rates and pitting corrosion, commonly referred to as microbiologically influenced corrosion. TOLCIDE® PS355A also helps to remove free oxygen from the water, thus eliminating an important nutrient for bacteria and an important reactant in many corrosion reactions.

TOLCIDE® PS355A should be added to a fire protection system using a chemical metering pump capable of variable pump rates. The TOLCIDE® PS355A should be injected at a point, such as a riser, manifold or makeup feed water line, where uniform mixing and distribution will occur. Add 215-857 ppm TOLCIDE® PS355A (75-300 ppm THPS) depending on severity of microbial contamination in the system. Repeat as needed.

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

**Initial Slug Dose:** Add 200-750 ppm of TOLCIDE® PS355A (70-262.5 ppm THPS) based on total water volume. Repeat until control is obtained. Thereafter, add either **Intermittently** 75-300 ppm of TOLCIDE® PS355A (26-105 ppm THPS) or **Continuously** 40-140 ppm of TOLCIDE® PS355A (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® PS355A 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.

### **SERVICE WATER AND AUXILIARY SYSTEMS**

TOLCIDE® PS355A should be added to service water and auxiliary systems 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

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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.

#### **AIR WASHER SYSTEMS**

For control of bacteria and fungi. This product may be used only in air washer systems which have mist eliminating components. Pre-clean the system with detergent and allow air washer to run with fan on for two hours. Flush and check nozzles, manually cleaning as necessary. Add 75-200 ppm of TOLCIDE® PS355A (26-70 ppm THPS) at a point where uniform mixing and even distribution will occur. Repeat as needed to maintain control.

#### **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® PS355A (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® PS355A to be added for the preservation of given formulations will depend on the components as well as local storage time and requirements.

#### **OIL FIELD AND PETROCHEMICAL OPERATIONS**

TOLCIDE® PS355A is effective in controlling sulfate reducing bacteria, 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® PS355A 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® PS355A is also effective for use in controlling microbial growth in fluids used for drilling and stimulation of oil wells.

#### **Water Floods**

TOLCIDE® PS355A 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® PS355A (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® PS355A (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® PS355A can be dosed continuously at a level of 30-143 ppm (10.5-50 ppm THPS).

#### **Oil and Gas Production and Transmission Pipelines and Systems**

TOLCIDE® PS355A should be added at a point in the pipeline where uniform mixing will occur. The application should be conducted to ensure maximum distribution of TOLCIDE® PS355A through the entire internal surface of the pipeline by adding an amount of biocide which eventually comes out the other end of the pipeline. Criteria for success of the treatment will be reduction in bacterial count and/or corrosion rates.

**Slug Dosing:** Follow instructions for water flood treatment.

**Continuous Dosing:** TOLCIDE® PS355A 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® PS355A should be added to these fluids at a point where uniform mixing will occur. Add 70-3000 ppm of TOLCIDE® PS355A (24.5-1050 ppm THPS) to a freshly prepared fluid depending on severity of contamination.

#### **Gas Storage Well and Systems**

Individual injection wells should be treated with TOLCIDE® PS355A at the same application rates, and in the same manner as described under Water Floods. Injections should be repeated as needed to maintain control.

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Individual drips should be treated with a sufficient quantity of TOLCIDE® PS355A to produce a concentration of 71.5-285 ppm TOLCIDE® PS355A (25-100 ppm THPS) when diluted by the water present in the drip. Injections should be repeated as needed to maintain control.

**Well Remediation Operations**

Individual production or injection wells may be bullheaded with Tolcide® PS355A to control bacteria and simultaneously dissolve iron sulfide deposits. The Tolcide® PS355A will be pumped into the well as a solution in water containing from 28.5 - 85% Tolcide® PS355A (10 - 30% THPS). The well is shut-in for a period of time (at least 6 hours) then put back into operation.

**Hydrotesting**

Water used to hydrotest pipelines or vessels should contain 143-1430 ppm TOLCIDE® PS355A (50-500 ppm THPS), depending on water quality and length of time the equipment will remain idle.

**Pipeline Pigging And Scraping Operation**

Add TOLCIDE® PS355A to a slug of water immediately following the scraper (ideally this water volume can be kept to a minimum and contained between the scraper and a trailing pig). Sufficient TOLCIDE® PS355A should be added to produce a concentration of 0.014% to 0.14% (50-500 ppm THPS) in the water at the discharge point or pig trap, depending on the length of the pipeline and the severity of biofouling.

TOLCIDE® is a registered trademark of Rhodia Consumer Specialties Limited.

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