**TOLCIDÉ® PS20A**

**INDUSTRIAL ANTIMICROBIAL**

**ACTIVE INGREDIENT:**
- Tetradecyl(dimethylethylammonium) chloride .......................... 20%

**OTHER INGREDIENTS:** .......................................................... 80%

**TOTAL:** .............................................................................. 100%

**EPA Reg. No. 4564-18**
**EPA Est. No. 80347-TX-1 81448-TX-1 81448-TX-2 81448-TX-3 81448-WV-1**

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

**FIRST AID**

If 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 eyes.
- Call a poison control center or doctor for treatment advice.

If swallowed:
- Call a poison control center or doctor immediately for treatment advice.
- Have 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 for further 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information call the National Pesticide Information Center at 1-800-853-7789, 7:30 AM to 7:30 PM, Eastern Time (ET). During other times, call the poison control center at 1-800-222-1222.

**Note to physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

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

Manufactured for:

**SOLVAY USA INC.**
8 Cedar Brook Drive • CN 7500
Crainbury, NJ 08512-7500 • 609-869-4000

Active ingredient produced in United Kingdom and/or China

**NET CONTENTS:** 270 Gallons

**TOLCIDÉ®** is a registered trademark of Rhodia UK Limited

**PRECAUTIONARY STATEMENTS**

**HAZARD TO HUMANS AND DOMESTIC ANIMALS**

**DANGER:** Corrosive. Causes irreversible eye damage. May be fatal if swallowed. Harmful if inhaled. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid breathing vapor or spray. Wear long-sleeved shirt and pants or coveralls, goggles or face shield and chemical-resistant gloves when handling.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**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 rinseate is a violation of Federal Law. If these wastes cannot be disposed of by using 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 HANDLING AND DISPOSAL:** Nonrefillable container, 5 gallons or less. Do not re-use or refill this container. Offer for recycling or reconditioning if appropriate. Do not reuse this container for any other purpose. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Pressure rinse the container for final disposal as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinseate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**CONTAINER HANDLING AND DISPOSAL:** Nonrefillable container (greater than 5 gallons). Do not re-use or refill this container. Offer for recycling or reconditioning if appropriate. Do not re-use or refill this container for any other purpose. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. Pressure rinse the container for final disposal as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinseate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.
DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Not for use in paint.

INDUSTRIAL AND/OR COMMERCIAL RECYCLING COOLING WATER SYSTEMS (for control of bacteria, fungi, and algae) [Not for Use in California]

Note: 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.

Initial Dosing: Add 20-159-012.5 ppm of TOLCIDE® P520A (40-202.5 ppm THPS) per 2.6 hours based on total water volume. Repeat until control is obtained. Thereafter, add either Intermittently 131.25-252.5 ppm of TOLCIDE® P520A (26-105 ppm THPS) or Continuously 76-243 ppm of TOLCIDE® P520A (14-49 ppm THPS) per day. Daily systems must be cleaned prior to treatment.

HEAT TRANSFER SYSTEMS (Evaporative Condensers, Dryer Wetted Systems, Heatstar Sterilizers and Retorts, Brewery and Other Pasteurizing, and Warmers)

Add TOLCIDE® P520A 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® P520A 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 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, fungi and algae) [Not for Use in California]

TOLCIDE® P520A may be used only in airflow systems which have mist eliminating components. Pre-clean the system with detergent and allow airflow to run with fan on for two hours. Flash and check nozzles, manually cleaning mixing and distribution will occur. Repeat as necessary to maintain control.

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

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

b) For use as a preservative to retard microbial growth in water-based coatings, stanchions, filler and filtration slurries.

Do not use in paper and paperboard adhesives that will contact food. [Not for Use in California]

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 25-250 ppm of TOLCIDE® P520A (50-500 ppm THPS) to the additive to be preserved based on the total weight of the adhesive and water.

INDUSTRIAL FRESH WATER SYSTEMS [Not for Use in California]

Do not use in freshwater systems that are the manufacturer of paper and paperboard products that may come into contact with food. [Not for Use in California]

TOLCIDE® P520A is effective in controlling algae in holding ponds and in cooling towers and in cooling towers and in treating fresh water systems supplying water to pulp and paper mills, textile mills, and other manufacturing plants. In pulp and paper mills, rinse of the fresh water with TOLCIDE® P520A can make an important contribution to algal control. The use of TOLCIDE® P520A as described will reduce the development of slime in fresh water pipes and other equipment, and on the pulp and paper mill machine parts caused by fresh water. For the control of algae in industrial fresh water systems, TOLCIDE® P520A should be added to provide a concentration of 3-50 ppm (1-50 ppm THPS). Treatment should be based on the amount of water entering the reservoir and on the equipment and on the machinery and equipment and on the machinery using the water. Weekly treatment can be made continuously, and the sludge-dosing treatment will provide adequate control.

SOLUTIONS/EMLUSIONS

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 aquatic liquids, the addition of 0.005% to 0.20% of TOLCIDE® P520A (0.01-0.17% 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® P520A to be added for the preservation of given emulsions will depend on the components as well as local storage time and requirements.

MACROFOULING CONTROL [Not for Use in California]

TOLCIDE® P520A 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 macrofooling is present in the system, apply 100 ppm of TOLCIDE® P520A (20 ppm THPS) based on total water volume, as needed to maintain the 20 ppm active ingredient (THPS) level for a period of at least 96 hours.

INDUSTRIAL WASTEWATER SYSTEMS (Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks) [Not for Use in California]

TOLCIDE® P520A should be added to a wastewater system or sludge at a convenient point of uniform mixing such as digester.

Sludge Dosing: Add 200-1412.5 ppm of TOLCIDE® P520A (40-202.5 ppm THPS) per 1,000 gallons of wastewater or sludge.

Continuous Dosing: Add 5-100 ppm of TOLCIDE® P520A (10-200 ppm THPS) per 1,000 gallons of wastewater or sludge.

FIRE PROTECTION SYSTEMS

TOLCIDE® P520A is effective in controlling microbial growth in water and in pipe systems in fire protection systems. Such organisms that are not controlled when combined with other forms of corrosion will lead to accelerated corrosion rates and plugging corrosion, commonly referred to as microbiologically influenced corrosion. TOLCIDE® P520A also helps to remove free oxygen from water, thus eliminating an additional nutrient for bacteria and an important reactant in many corrosion reactions.

TOLCIDE® P520A should be added to a fire protection system using a chemical metering pump capable of variable pump rates.

TOLCIDE® P520A should be injected at a point, such as a fire, manifold or makeup water feed line, where uniform mixing and distribution will occur. Add 375-1500 ppm TOLCIDE® P520A (75-300 ppm THPS) depending on severity of microbiological contamination in the water system.

OIL FIELD AND PETROCHEMICAL OPERATIONS

TOLCIDE® P520A is effective in controlling sulfate-reducing bacteria, general anaerobic bacteria, including microorganisms that contribute to putrefaction in oil field recovery, processing and distribution applications and oilspill systems, such as injection water, water holding tanks, disposal well water, recirculating water handling systems, and pipelines. TOLCIDE® P520A has been shown to desiccate iron sulfide and prevent iron corrode under these conditions, leading to improved life and well integrity, and reduction of hydrogen sulfide. TOLCIDE® P520A is also effective in use in controlling microbial growth in fluids used for drilling and stimulation of wells.

Water Floods [Not for Use in California]

TOLCIDE® P520A should be added to a water flood system at a point where uniform mixing will occur.

Initial Treatment: For a newly flooded system, add 350-1512.5 ppm TOLCIDE® P520A (70-302.5 ppm THPS).

When adding to a flooded system, slug dose for 2-4 hours based on flow rates. Repeat as necessary until control is achieved. Subsequent Treatment: Once control has been achieved, add 25-350 ppm TOLCIDE® P520A (50-70 ppm THPS) weekly or as needed to maintain control. Add a slug dose to a flooded system for 2-4 hours based on flow rates. Continuous Treatment: TOLCIDE® P520A should be added at a point of a level of 1-500 ppm (2-500 ppm THPS).

Oil and Gas Production and Transmission Pipelines and Systems

TOLCIDE® P520A should be added at a point in the pipeline where uniform mixing will occur. The application should be conducted to ensure maximum distribution of the additive based on the total weight or volume of the pipeline by adding an amount of the additive which is continuous throughout the pipe. The application of the additive will be based on the length of pipeline controlled by the overall volume of the pipeline. The criteria for success of the treatment will be in bacterial count and/or corrosion rates. Slug Dosing: Follow instructions for water flood treatment. Continuous Dosing: TOLCIDE® P520A can be dosed continuously at a level of 5-375 ppm (10.5-75 ppm THPS).

Hydraulic Fracturing [Not for Use in California]

TOLCIDE® P520A should be added to the frac water storage tanks or directly into the wellhead injection piping as the water is being pumped downhole. Add 250-1312.5 ppm of TOLCIDE® P520A (50-262.5 ppm THPS), depending on the degree of bacterial fouling in the source water.

Drilling Muds, fracking Fluids, Completion and Workover Fluids

TOLCIDE® P520A should be added to base fluids at a point where uniform mixing will occur. Add 125-525 ppm TOLCIDE® P520A (25-105 ppm THPS) to a freshly prepared fluid depending on severity of contamination.

Gas Storage Well unit systems [Not for Use in California]

Individual injection wells should be treated with TOLCIDE® P520A at the same application rates, if in the same manner as described under Water Floods. Injection wells should be repeated as needed to maintain control.

Individually drilled wells should be treated with a sufficient quantity of TOLCIDE® P520A to produce a concentration of 125-500 ppm TOLCIDE® P520A (25-100 ppm THPS) when added by the water present in the well. Injection wells should be repeated as needed to maintain control.

Well Infection Operations [Not for Use in California]

Individual production or injection wells may be biologically treated with TOLCIDE® P520A to control bacteria and simultaneously disperse iron sulfide deposits. TOLCIDE® P520A will be pumped into the well as a solution in water containing 50 to 100% TOLCIDE® P520A (10-20% THPS). The well is shut-in for a period of time (at least 48 hours) then put back into operation.

Hydrotesting Water used in hydrotreating processes or vessels shall contain 250-2500 ppm TOLCIDE® P520A (50-500 ppm THPS) depending on water quality and length of time the equipment will remain idle.

Pipeline Pigging and Scrapping Operation

Add TOLCIDE® P520A to a slug of water immediately following the scraper ideally this water volume can be kept to a minimum and between the scraper and a pulling pig. Sufficient product should be added to produce a concentration of 0.25% to 0.25% (50-500 ppm THPS) in the water at the discharge point or pig entry and depending on the length of the pipeline and the severity of the blockage.