



APPLICATION  
DATA

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

**INDUSTRIAL RECIRCULATING WATER COOLING TOWERS:**

For the control of bacteria, algae, and fungi add N-922 Antimicrobial to the tower basin, distribution or some other point to insure uniform mixing. Initial Dose: When the system is noticeably fouled, apply 148 to 883 ppm N-922 Antimicrobial (1.26 to 7.46 pounds or 19 to 113 fluid ounces of N-922 Antimicrobial per 1,000 gallons of water in the system). Repeat until control is achieved. Subsequent Dose: When microbial control is evident add 35 to 219 ppm N-922 Antimicrobial (0.3 to 1.86 pounds or 4.5 to 28 fluid ounces of N-922 Antimicrobial per 1000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

**AIR WASHER SYSTEMS:**

Add to the air washer sump or chill washer sump, to insure uniform mixing, 35 to 883 ppm N-922 Antimicrobial (0.3 to 7.46 pounds or 4.5 to 113 fluid ounces, of N-922 Antimicrobial per 1,000 gallons of water in the system) depending upon the severity of contamination to control bacteria, fungi and algae which cause fouling in industrial air washer system. Intermittent or Slug Method - Initial Dose: When the system is noticeably fouled, apply 148 to 883 ppm N-922 Antimicrobial (1.26 to 7.46 pounds or 19 to 113 fluid ounces of N-922 Antimicrobial per 1000 gallons of water in the system). Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 35 to 219 ppm N-922 Antimicrobial (0.3 to 1.86 pounds or 4.5 to 28 fluid ounces of N-922 Antimicrobial per 1000 gallons of water) weekly or as needed to maintain control. Continuous Feed Method - Initial Dose: When the system is just notice fouled, apply 148 to 883 ppm N-922 Antimicrobial (1.26 to 7.46 pounds or 19 to 113 fluid ounces of N-922 Antimicrobial per 1000 gallons of water in the system). Subsequent Dose: Maintain this treatment level by adding a continuous feed of 35 to 219 ppm N-922 Antimicrobial (0.3 to 1.86 pounds or 4.5 to 28 fluid ounce of N-922 Antimicrobial per 1,000 gallons of makeup water). Badly fouled systems must be cleaned before initial treatment. NOTE: For use only in industrial air washing systems that maintain effective mist eliminating components.

**INDUSTRIAL RECIRCULATING CLOSED LOOP WATER COOLING SYSTEMS:**

For the control of bacteria, algae and fungi, add N-922 Antimicrobial to the reservoir, recirculating line or some other point in the system to insure uniform mixing.

Initial Dose: When the system is noticeably fouled, apply 148 to 883 to ppm N-922 Antimicrobial (1.26 to 7.46 pounds or 19 to 113 fluid ounces of N-922 Antimicrobial per 1,000 gallons of water in the system).

Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 35 to 219 ppm N-922 Antimicrobial (0.3 to 1.86 pounds or 4.5 to 28 fluid ounces of N-922 Antimicrobial per 1,000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

**POLYMER LATEX PRESERVATION:**

N-922 Antimicrobial is recommended for the control of bacteria and fungi in the manufacture and storage of synthetic and natural polymer latices including; styrene/butadiene; carboxylated styrene/butadiene; ethylene/acetate, and biopolymers intended for industrial use, such as xanthum gum, gum arabic, guar gum, protein-derived polymers, starches, and casein-derived polymer. Add 0.43-3.3 lbs. of N-922 Antimicrobial (195 g - 1.5 kg) to each 1,000 lbs. (454 kg) of emulsion to provide 425 to 3,350 ppm product (6.25 to 50 ppm active isothiazolones). NOTE: To insure uniform mixing add N-922 Antimicrobial to latex or solutions slowly with agitation. The actual concentrations required will depend upon such factors as the specific substance to be treated, frequency of repeated microbial contamination expected and level of protection required.

**ADHESIVE AND TACKIFIER PRESERVATION:**

N-922 Antimicrobial is recommended as an in-container preservative for the control of bacteria and fungi in water-soluble and water-dispersed adhesives such as animal glues, vegetable glues, natural rubber latices, polyvinyl acetate, styrene-butadiene, and acrylic latices. N-922 Antimicrobial is recommended as a preservative for tackifiers derived from resin and hydrocarbon resins, Add 0.43-1.65 lbs of N-922 Antimicrobial (195 - 750 g) to each 1,000 lbs (454 kg) of fluid to provide 425 to 1,676 ppm product (6.25 to 25 ppm active isothiazolones).

**PAINT AND COATINGS PRESERVATION:**

N-922 Antimicrobial is recommended as an in-container preservative for the control of bacteria and fungi in water-based coatings such as paper and wood coatings and paints used for architectural product finishes, and special purpose coatings. Add 0.43 - 1.65 lbs. of N-922 Antimicrobial (195 -750 g) to each 1000 lbs (454 kg) of fluid to provide 425 to 1,675 ppm product (6.25 to 25 ppm active isothiazolones)

APPLICATION  
DATA  
CONT.

**BUILDING MATERIAL PRESERVATION:**

N-922 Antimicrobial is recommended as an in-container preservative for the control of bacteria and fungi in building materials such as mastics, caulks, joint cement, spackling and grouting. Add 0.43 - 1.65 lbs. of N-922 Antimicrobial (196 - 750 g) to each 1000 lbs. (454 kg) of fluid to provide 425 to 1,675 ppm product (6.25 to 25 ppm active isothiazolones).

**DISPERSED PIGMENT PRESERVATION:**

N-922 Antimicrobial is recommended for the control of bacteria and fungi in the manufacture and storage of dispersed pigment such as kaolin clay, montmorillite clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate, and kieselguhr used in paint and paper production, Add 0.43 - 1.65 lbs. of N-922 Antimicrobial (195 - 750 g) to each 1000 lbs. (454 kg) of fluid to provide 425 to 1,675 ppm product (6.25 to 25 ppm active isothiazolones).

**REVERSE OSMOSIS SYSTEMS:**

N-922 Antimicrobial may be used to control microbiological fouling in reverse osmosis systems used for process water and other non-potable applications. N-922 Antimicrobial should be fed to the membrane feedwater at a rate of 20-120 ppm (2.75-16.5 fluid ounces per 1000 gallons of water) The product should be added continuously for a time period of 1-24 hours, 1-7 days each week depending on the severity of the problem. For off-line cleaning, N-922 Antimicrobial should be added to provide a level of 100-400 ppm (13.75 to 55 fluid ounces per 1000 gallons) in the soak solution.

**COMMERCIAL PHOTOPROCESSING SYSTEM PRESERVATION:**

N-922 Antimicrobial is recommended to prevent slime formation or accumulation in filters and ion exchange resin tanks of commercial photoprocessing systems. For the maintenance of a non-fouled system, use N-922 Antimicrobial at 32 - 64 fluid ounces (2.1 lbs. - 4.2 lbs) per 1000 gallons water in the system once weekly, or as needed, to maintain control of slime. For a noticeably fouled system, use an initial dose of 64 - 154 fluid ounces (4.2 lbs - 10 lbs.) per 1000 gallons water to be followed by subsequent maintenance dosage. A high dosage range and/or increased frequency of treatment may be required depending upon rate of dilution of preservative with makeup fluid, the nature and severity of contamination, level of control required, filtration effectiveness, system design, etc. The preservative should be dispensed into the final rinse or used water collection tank.

**CONVEYOR LUBRICANTS:**

N-922 Antimicrobial can be used to control microorganisms in water-based conveyor lubricants. N-922 Antimicrobial can either be added to the lubricant concentrate or can be added to the lubricant dilution feed line using a chemical metering pump. In lubricant concentrates, N-922 Antimicrobial should be added at a level that will ensure a final use dilution of 200 - 1000 ppm of N-922 Antimicrobial (3 -5 ppm active). When fed to the lubricant dilution feed line, an initial metered dose of 50 - 126 fluid ounces of N-922 Antimicrobial per 1000 gallons of diluted conveyor lubricant is recommended until control is achieved. A subsequent metered dose of 26 - 126 fluid ounces per 1000 gallons should be made to maintain 3-15 ppm active N-922 Antimicrobial in the diluted conveyor lubricant.

**FUEL PRESERVATION:**

N-922 Antimicrobial is recommended for the control of bacteria and fungi in the following liquid hydrocarbon fuels and oils: crude oils, aviation fuels, kerosene, heating oils, diesel fuels, residual fuel oils, coal slurries, liquefied petroleum gases and petrochemical feedstocks. Method of Addition: N-922 Antimicrobial should be directly dispersed into a fuel tank, storage tank or a flowing stream of fuel in a manner to ensure uniform distribution of the preservative in the system. Slug dose or continuous feed methods are recommended. Curative Dose, When the system is noticeably fouled, add 1-2 gallons N-922 Antimicrobial per 10,000 gallons of fluid in the system This will provide 100 to 200 ppm of N-922 Antimicrobial and 1.5-3.0 ppm active ingredient. Repeat until control is achieved. A shock dose of up to 4 gallon of N-922 Antimicrobial per 10,000 gallons of fluid is recommended in the case of extreme contamination. Grossly contaminated systems should be physically cleaned to remove debris. Maintenance Dose: When the system is noticeably fouled, add 0.5 to 1.5 gallons of N-922 Antimicrobial per 10,000 gallon of fluid to maintain the system. This will provide 50 to 150 ppm of N- 922 Antimicrobial and 0.75-2.25 ppm active ingredient. Repeat every 4-6 weeks or when microbial contamination is detected. FOR USE IN AVIATION FUEL, THE FEDERAL

AVIATION ADMINISTRATION MUST BE CONSULTED AS TO THE ACCEPTABILITY OF THE ADDITIVE FOR USE IN SPECIFIC ENGINES AND/OR AIRCRAFT.

TYPICAL PROPERTIES	<p>Appearance: Clear to light green liquid</p> <p>Odor: Aromatic (slight)</p> <p>Density at 25°C (77°F): 1.02 g/cm<sup>3</sup></p> <p>Density: 8.4 lb/gal</p> <p>Volume per pound: 445 mL</p> <p>Volume per kilogram: 980 mL</p> <p>pH: (neat) 2.5 - 5</p> <p>pH (100 ppm in water): 6.5</p> <p>Flash point: &gt; 100°C (&gt;212°F)</p> <p>Freezing point: - 3°C (26.6°F)</p>
--------------------	---

HANDLING / STORAGE AND DISPOSAL	<p>Improper handling of this product can be injurious to workers. Observe all safety precautions shown on the label and in the Material Safety Data Sheet.</p> <p><b>SEE N922 ANTIMICROBIAL MATERIAL SAFETY DATA SHEET FOR SAFETY INFORMATION.</b></p>
---------------------------------	--

PACKAGING	<p>Packaging and handling</p> <p>N922 Antimicrobial is a liquid packed in nonreturnable drums, returnable semibulk containers, and in bulk. Refer to Material Safety Data Sheet for suitable materials of construction for handling and storing this product.</p>
-----------	---

REGISTRATIONS AND APPROVALS	<p>N922 Antimicrobial is registered by the U.S. Environmental Protection Agency (EPA Registration Number: 1448-348-67869) and under FDA: <b>21CFR 175.105 adhesives</b>  <b>21CFR 176.170 and 176.180 paper coatings</b>  <b>21CFR 176.300 slimicides</b></p>
-----------------------------	---



For more information call: 1 800 778-5462 • FAX 1 412 331-7884  
 Or write VERICHEM, 3499 Grand Avenue, Pittsburgh, Pennsylvania 15225

**CHEMICAL SOLUTIONS FOR MICROBIOLOGICAL PROBLEMS**