

BIOPROTECT 500

PRODUCT DESCRIPTION

BIOPROTECT 500 is a non-flammable 5 weight percent water-based solution of a Silicone Quaternary Ammonium Salt, which can produce a durable, non-leaching, and non-migrating antimicrobial finish to a wide range of textiles. BIOPROTECT 500 is effective against gram (+) and gram (-) bacteria, fungi, algae, and yeasts. With a small amount of BIOPROTECT and proper application, one can achieve excellent bacteriostatic, fungistatic and algaestatic inhibition/protection.

PRODUCT PROPERTIES

Appearance Liquid, clear Density at 25°C 1.00 g/ml pH (20°C) 4 –6

Water Solubility Miscible
Freezing Point 32°F / 0.0°C
Boiling Point 212°F / 100°C

APPLICATION & USE

<u>For Pump Spray Application:</u> Dilute 8 oz of BIOPROTECT 500 per gallon of water (2 oz per quart; 1 oz per pint). Using pump sprayer, spray entire area 4"-6"s from the surface making sure the surface is completely covered. Apply and then let stand until dry or let stand 3 minutes and wipe dry with cloth or sponge. If spotting occurs, wipe with moist cloth or sponge. Test for staining and color-fastness of fabrics and carpets by treating and drying a small, concealed area prior to application. BIOPROTECT 500 treats approximately 200 sq ft per diluted gallon of water. When treating coarser substrates, more BIOPROTECT 500 may be required due to absorption. A fan may be used to assist in drying carpet.

<u>For Commercial Spray Application:</u> For commercial application equipment (i.e. carpet/upholstery steamers, rotary jet extractor cleaners, and pressure sprayers) dilute 8 oz of BIOPROTECT 500 per gallon of water (2 oz per quart; 1 oz per pint); mix well. Apply and then let stand until dry or let stand 3 minutes and wipe dry with cloth or sponge. If spotting occurs, wipe with moist cloth or sponge. Test for staining and color-fastness of fabrics and carpets by treating and drying a small, concealed area prior to application. BIO-PROTECT 500 treats approximately 200 sq ft per diluted gallon of water. When treating more coarse substrates, more BIOPROTECT 500 may be required due to absorption. Dry carpet areas and surfaces before re-entry and dry articles before use. A fan may be used to assist in drying carpet.

<u>For Dipping/Soaking Application:</u> Use appropriate sized wash basin or tub for dipping/soaking the item you are treating. Use enough BIOPROTECT 500 solution to completely submerge item. Dilute 8 oz of BIOPROTECT 500 per gallon of water (2 oz per quart; 1 oz per pint); mix well. Completely submerge item in solution for 3 minutes. Remove item and dry. Test for staining and color-fastness of fabrics by treating and drying a small, concealed area prior to application. Do not reuse solution after dipping/soaking.

The substrate can be dried at room temperature or at temperatures to a maximum of 160°C (320°F), for example in a clothes dryer. Remove excess liquid before attempting to dry in a clothes dryer. If necessary, re-apply BIOPROTECT 500 every 3 months or when odor, staining, and discoloration due to bacteria, mold stains, and mildew stains return.

<u>Approved Uses</u>: The active ingredient in BIOPROTECT 500 is effective against odor-causing bacteria, bacteria which cause staining and discoloration, fungi (mold and mildew) and algae as a static agent. BIOPROTECT 500 can be used as a final bacteriostatic/fungistatic on the following items to impart bacteriostatic/fungistatic (mold and mildew) activity.

Approved for application in homes, offices, automobiles and institutions e.g., schools, hospitals, daycare centers, churches, correctional facilities. Air Filters for furnaces, air-conditioners, air purification devices, automobiles, re-circulating air handling systems; bed sheets, blankets, and bedspreads; buffer pads (abrasive and polishing); carpets and draperies; cellulose sponges; exterior walls (such as stone, concrete, brick); fiberfill for upholstery, sleeping bags, apparel, where the fiber is cotton, natural down, nylon, polyester, rayon, or wool; fiberglass duct board; fire hose fabric; humidifier belts; mattress pads and ticking; men's underwear and outerwear; non-woven polyester; outerwear apparel (jackets, sweaters, sweatshirts, coats, raincoats, overcoats, jerseys, ponchos); polyurethane and cellulose foam for household, industrial, and institutional sponges and mops; sand bags, tents, tarpaulins, sails, and ropes; athletic and casual socks; shoe insoles; shower curtains; socks comprised of nylon, nylon/orlon, cotton/nylon, linen/Lycra, acrylic/polypropylene, nylon, Lycra, wood/silk/nylon/Lycra and wool/acrylic/nylon/Lycra; throw rugs; toweling made of 100% cotton, 100% polyester, and blends of the two fibers; toilet tank and seat covers; umbrellas; upholstery made of acetates, acrylics, cotton, fiberglass, nylon, polyester, polyethylene, polyolefins, polypropylene, rayon, spandex, vinyl, wool; vinyl paper-wallpaper for non-food contact surfaces; disposable wiping cloths that can be used for multiple purposes such as dusting or washing furniture, cars, walls, windows, floors, appliances, dishes, counter tops; the wiping cloths do not impart pesticide properties; women's hosiery and intimate apparel.

HEALTH & SAFETY

Refer to Safety Data Sheet (SDS) for full Health and Safety Details.

HANDLING & STORAGE

<u>Protective Measures:</u> Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Wear appropriate respirator when ventilation is inadequate. Do not enter storage spaces unless adequately ventilated. Keep in the original container and keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking, or smoking. Wear appropriate personal protective equipment.

<u>Conditions for Safe Storage:</u> Do not store below 0°C (32°F). Store in accordance with local regulations. Store in a segregated area. Store in original container protected from direct sunlight in a dry, cool, and well ventilated area, away from incompatible materials and food and drink. Separate from acids and oxidizing materials. Keep container closed and tightly sealed until ready for use. Use appropriate containment to avoid environmental contamination. Empty containers retain product residue and can be hazardous. Do not reuse container.

DISPOSAL INSTRUCTIONS

<u>Waste Disposal Method:</u> Do not contaminate water, food, or feed by storage and disposal. If these wastes cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency of the Hazardous Waste Representative at the nearest EPA regional office for guidance.

<u>Pesticide Disposal:</u> Contaminated products/soil/water may be RCRA/OSHA hazardous waste. Inactivation of solutions containing BIOPROTECT 500 may be accomplished by addition of an equivalent amount of anionic surfactant or detergent. Container disposal: (plastic) Triple rinse (or equivalent) then offer for recycling or reconditioning, puncture and dispose of in a sanitary landfill, incineration, or by burning (if allowed by the state and local authorities). If burned, stay out of smoke.