

Bactericidal Activity: By the AOAC Use Dilution method. The required Use Definition that appears on this products label claiming disinfection of inanimate, hard, non-porous and semi-porous surfaces; as found in the hospital, institution or home environment. Complete kill against;

| | |
|-------------------------------------------|-------------------|
| Staphylococcus aureus (ATCC #C538) at | 430 ppm (2oz/gal) |
| Salmonella typhosa (ATCC #6539) at | 400 ppm |
| Pseudomonas aeruginosa M PRD10(ATCC#15442 | 550 ppm |

PHENOL COEFFICIENT METHOD AOAC: The maximum killing dilution observed, divided by the resistance of the organism iophenol is the phenol coefficient.
Phenol Coefficient against:

| | |
|------------------------------------|-----|
| Staphylococcus aureus (ATCC #6538) | 925 |
| Salmonella typhosa (ATCC #6539) | 604 |

(Enterobacter, gram Negative rod, pathogenic, specific agent of typhoid fever.)

SANITIZING ACTIVITY: By Germicidal and Detergent Sanitizer Method: Methods of Analyses, AOAC 13th edition 1980. The minimum concentration of germicide which can be permitted for use in sanitizing food contact surfaces as well as sanitizing hard, non-porous surfaces in the environment; as are found in dairy and food processing operations equipment and in restaurant and bar utensils, Quaternaries must describe hard water at dilution against Escherichia coli (ATCC #11229) effective in water at 200 ppm active ingredient up to 750 ppm CaCO₃, Staphylococcus aureus (ATCC #6538) effective at 200 ppm active ingredient up to 750 ppm CaCO₃.

VIROCIDAL ACTIVITY: By EPA Hard Surface Virucidal Test; "EPA Guidelines for Registering Pesticides", Federal Register Vol. 40 no, 123 Wednesday June 25, 1975 Pg. 26836

Complete Virucidal inactivation against:

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Influenza A2-Asian | 550 ppm |
| RNA containing virus of the family Myxoviruses. Lyphophilic. Frequently causes respiratory disease epidemics (common flu). | |
| Herpes Simplex | 550 ppm |
| A DNA containing virus of the family Aepesviruses. Lyphophilic causative agent of fever blisters, cold sores, and mononucleosis. | |
| Adenovirus Type 5 | 550 ppm |
| A DNA containing virus of the family Adenoviruses. Non-Lyphophilic causative agent of upper respiratory infections, sore throats, and infected tonsils and adenoids. | |
| Vaccina Virus | 550 ppm |
| A DNA containing virus of the family Poxviruses. Non-Lyphophilic virus used to vaccinate against small pox (also Poxvirus family) Vaccina virus probably isolated from cow pox. | |

FUNGICIDAL/FUNGISTATIC ACTIVITY: By Fungicidal Test Method: Methods of Analysis AOAC 13th edition 1980 Pg. 61 The maximum dilution effective as pathogenic fungicide.

EFFECTIVE LEVEL AGAINST:

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Tricophyton Mentagrophytes strain #640 | 500 ppm |
| In the presence of soda ash as is found in built detergent/disinfectants. Tricophyton is a dermatophyte widely distributed and causes skin and nail pathology. Causative agent of Athlete's Foot Disease. | |

| | |
|------------------------------------------------------------------------------------------------------------|-----------------------|
| FUNGISTATIC ACTIVITY | (1 to 1,000 dilution) |
| Aspergillus niger | |
| ATCC #6275 ATCC | 50 ppm |
| Ascomycete a highly infectious and pathenogenic to poultry chicks. Contaminant of decaying organic matter. | |
| #10535 | 15 ppm |
| Causes food spoilage and deterioration of many economically important substances. | |
| IPC#14 | 15 ppm |

| | |
|----------------------------------------------------------------------------------------------------------------------------------------|-------|
| Tricophyton Mentagrophytes | 2 ppm |
| Candida albicans Yeast ATCC#10321 | 5 ppm |
| Pathenogenic to man and a causative agent of moniliasis. | |
| Pityrosporum ovale Yeast ATCC #14521 | 2 ppm |
| Found on scalp and skin and associated with dandruff scales. Implicated in eruptive skin conditions including sever dandruff syndrome. | |

RECOMMENDED DILUTION RATES

- 2500 ppm (6 oz per gallon) Normally with 15-70% alcohol as a spray disinfectant and aerosol disinfectant, for cleaning and disinfecting hospitals at the highest level necessary.
- 1,000 ppm (3 oz per gallon) Cold disinfection and storage solution for surgical instruments. Deodorize by sluicing. Suggest addition of 15-25% alcohol for TB. Suggest use of FreshAWL Mediquat™ Activator for long term storage in solutions.

- 650-700 ppm (2 oz per gallon) Formulated detergent/disinfectant and deodorizers for hospitals. Solubilizer for TBTO.
- 500-650 ppm (1.5 to 2 oz per gallon) Formulated detergent/disinfectant and deodorizers for industrial and household cleaning.
- 400-550 ppm (1.5 oz per gallon) Non-formulated aqueous solutions for disinfection of previously cleaned surfaces, articles (e.g. dishes or dairy equipment) against Gram-positive, Gram-negative bacteria including Pseudomonas. In dairy processing plants provides effective control against Thermoduric bacteria (heat surviving) around pasteurizers and Psychrophiles that cause problems in cold storage areas.
- 250-300 ppm (1 oz or 8 lbs of laundry) to impart residual self sanitizing activity to fabrics during laundering operations. Treatment levels are as parts per million of active quaternary per weight of dry laundry fabric are at 250 ppm against Staphylococcus aureus (ATCC#6538) and at 300 ppm against Klebsiella pneumoniae (ATCC#4352).
- 200 ppm (¾oz per gallon) Hard surface sanitization, residual self-sanitization of food processing equipment, utensils, and food contact surfaces without a final rinse. Residual bacteriostatic activity for control of malodors in fabrics.
- 200 ppm (¾ oz per gallon) Hard surface sanitization, residual self-sanitization and residual bacteriostatic on laundry against Gram-negative bacteria and odor control in clothes when added to final rinse. Sanitization of food processing equipment, utensils, and food contact surfaces without a final rinse.
- 10-50 ppm (1 oz per 7-35 gallons) Residual bacteriostatic activity against Staphylococcus on laundry when added to final rinse.

INDUSTRIAL WATER TREATMENT

- 0.5-10 ppm (1 oz to 300 gallons) May be used to control algae growth in industrial water cooling towers, in water flooding operations and public and private swimming pools, FreshAWL MEDIQUAT™ maintains maximum efficiency against resistant organisms such as Black Algae (Phormidium inundatum) and Square D (Phormidium retzii), as well as, Green Algae (Chlorella pyrenoidosa) and Blue-green Algae (Lyngbya versicolor).
- The recommended use levels for industrial cooling towers may vary from 5-70 ppm depending tower operating conditions.

ANTIMICROBIAL ACTIVITY 550 PPM OR 2 OZ/GALLON KILLS ALL THE BACTERIA BELOW:

- Staphylococcus aureus ATCC #6538 Coccus. Environmental contaminants of hospitals and public areas and of fomites therein. Contaminants of food producing harmful toxins.
- Staphylococcus epidermis ATCC #14990 Coccus. part of normal resident flora of skin and mucous membranes.
- Staphylococcus faecalis ATCC #687I Coccus. Resident of intestinal organs of man and consequently indicator of fecal contamination. May cause spoilage of food, especially dairy products.
- Brevibacterium ammoniagenes ATCC #1965 Bacterium. Contaminant of feces of infants. Ferments urine to form ammonia.
- Bacillus subtilis. Bacillus widely distributed in soil and decomposing organic matter. Used to make enzymes.
- Salmonella typhosa ATCC #6539 Enterobacter specific agent of typhoid fever. Contaminant of food and water.
- Salmonella choleraesius ATCC #10708 Enterobacter pathogen in livestock. Contaminant in food and water.
- Salmonella pullorum. Enterobacter important pathogen of domestic fowl and livestock. Contaminant of food and water.
- Escherichia coli ATCC #11229, Klebsiella pneumoniae ATCC#9120 Enterobacter pathogen of adult man. Frequent cause of diarrhea. Present in normal floa of human feces and so indicative of fecal contamination. Contaminant of food and water.
- Proteus mirabilis ATCC #9921 Enterobacter widely distributed as contaminant of putrefying organic matter. Ferment urea to ammonia and is highly resistant to chemical action.
- Proteus vulgaris ATCC #8427 Enterobacter widely distributed as contaminant of putrefying organic matter. Attacks food causing spoilage and is highly resistant to chemical action.
- Pseudomonas aeruginosa ATCC #15442 Pseudomonad severely pathenogenic to man, water borne. Environmental contaminant of hospitals and public places. Contaminant of aqueous and emulsion type products causing spoilage of cosmetics, paints, etc. Contaminant of food and processed foodstuffs causing spoilage. Highly resistant to chemical action.
- Pseudomonas flourescens ATCC #10796 Pseudomonad pathenogenic to man, infrequent of livestock. Widely distributed and water borne as contaminant of foods and processed foodstuffs causing spoilage. Highly resistant to chemical action.



Power system DUAL QUATERNARY Detergent & Deodorizer

FreshAWL™ MEDIQUAT™ is an all-purpose cleaner, deodorizer, disinfectant, sterilizer, fungicide, virucide, algacide, bacteriostat, and mildewstat.

Its chemistry is a non-toxic, non-flammable, biodegradable quaternary product safe for the environment with no hazardous waste disposal problems, available in CONCENTRATE and READY-TO-USE solutions.



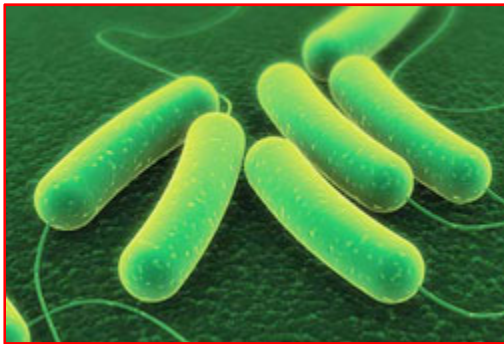
Environmentally Safe Surface Treatment Products for Commercial, Institutional, and Home Use from FreshAWL™

FreshAWL, LLC
596 Silver Drive • Vacaville, CA 95687
p (888) 400-FAWL (3295) e info@freshawl.com



The Complete DUAL-QUAT®

Broad Spectrum Sanitizer and Disinfectant for the fight against Gram-positive and Gram-negative organisms.



FRESHAWL™ MEDIQUAT™ sets the bar higher for a new standard of performance in the field of quaternary ammonium compounds that disrupt target cell membranes and proteins.

FRESHAWL™ MEDIQUAT™ is a Dual-Quat solution that provides a *Synergistic Action* between the two components comprising its active ingredients which increase the quaternary's ability to kill and inhibit bacterial growth.

FRESHAWL™ MEDIQUAT™ is durable and versatile – able to disinfect even in hard water and in the presence of organic soiling unlike other less-effective quats being used.

FRESHAWL™ MEDIQUAT™ is authorized under the Food Additive Amendment of the Federal Food, Drug, and Cosmetic Act for use without a final potable water rinse, as a sanitizing solution at 200 ppm on food contact surfaces, food processing equipment, and utensils." *

*Refer to the Code of Federal Regulations Part 178 Subpart B, Section 178.1010
• "Sanitizing Solutions".

Due to the innate wetting action of its active ingredients, **FRESHAWL™ MEDIQUAT™** is able to penetrate hard to access cracks, crevices, and porous surfaces in order to provide treatment on contact at the root of the contamination.

CORROSION:

FRESHAWL™ MEDIQUAT™ in solution is non-corrosive and non-staining to metals, asphalt tiles, terrazzo, and plastic surfaces. It is not recommended, however, that concentrated solutions be stored in iron, brass, or aluminum containers.

FRESHAWL™ MEDIQUAT™ Kills the Aids Virus (HIV-1), on pre-cleaned surfaces and objects previously soiled with blood or body fluids. Surfaces must remain wet for 10 minutes at the listed application rate.

New Federal Regulations have disallowed calling this product professional strength, or by any superlative, but **FRESHAWL™ MEDIQUAT™** has the highest registered residual concentration allowed for sanitizers on pre-cleaned surfaces.

FRESHAWL™ MEDIQUAT™ is specifically formulated for hospitals, nursing homes, schools,

food processing plants, and food service establishments where housekeeping is of prime importance in controlling hazards of cross contamination.

FRESHAWL™ MEDIQUAT™ is an effective deodorizer when used in areas which generally fresh scent challenged such as food storage areas, dispensing equipment, garbage storage areas, and toilet bowls.

The fragrance for **FRESHAWL™ MEDIQUAT™** Detergent and Disinfectant has been carefully chosen from among many for its ability to freshen foul smelling areas assuring you of cleanliness without lingering chemical scents which often distract patients, clients, or workers. The product and its fragrance work to clean, sanitize, and then eliminate odors at their source.



FreshAWL MEDIQUAT™ IS A CLEANER THAT:

- May be used to strip wax and degrease equipment prior to disinfecting;
- Is a built detergent, with surfactants, sequestrants, and anti-redeposition agents;
- Cleans laundry and self-sanitizes fabrics against Staphylococcus Aureus and Klebsiella Pneumoniae.