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SoftCIDE™

Extra-Mild Healthcare Personnel Handwash

Thermo Scientific SoftCIDE is an extra-mild, fast acting antimicrobial hand soap (1% PCMX); effective against a broad spectrum of microorganisms, yeast and fungi. Formula contains mild ingredients and is pH balanced with the skin. Shelf Life: 3 years.

SoftCIDE™ is a "Healthcare Personnel Handwash" (HPHW). An HPHW, as defined by the FDA, is a soap containing an antimicrobial agent that is intended to reduce transient microorganisms on intact skin and must be broad-spectrum and fast-acting.1 In most routine patient care areas, removal of transient microorganisms (not resident flora) is the primary concern and either a Non-antimicrobial soap or HPHW should be used.2 We recommend an HPHW because its anti-microbial agent enhances the mechanical removal of transient flora to maximize reduction.

The two most common ingredients used in HPHW's are Chloroxylenol (PCMX) and Triclosan. Chlorhexidine Gluconate (CHG), which is the most common antimicrobial agent used in Surgical Scrubs, is not recommended for purposes of an HPHW because it is considerably more irritating to the skin. We chose Chloroxylenol for SoftCIDE because it has excellent broad spectrum and fast-acting activity without being irritating to the skin. Conversely, Triclosan lacks strong antimicrobial activity against some bacteria unless several "enhancing" ingredients are added to the formula. We found that these extra ingredients resulted in a formulation that can be more drying to the skin.

The unique formulations of Thermo Scientific SoftCIDE soap replenish the natural oils of the skin. Each SoftCIDE soap contains mild ingredients and is pH balanced with the skin.

Kill Time Study

To determine the effectiveness of SoftCIDE against a broad spectrum of microorganisms, a Microbial Kill-Time Study was conducted. This test measures the amount of microbial kill of ten different microorganism strains at 15, 30, and 60 seconds.

Test Organisms	% Reduction 15 Seconds	% Reduction 30 Seconds	% Reduction 60 Seconds
Staphylococcus aureus	99.8%	99.8%	99.8%
Methicillin Resistant Staphylococcus aureus	99.9%	>99.99%	>99.99%
Streptococcus pneumoniae	99.8%	99.9%	>99.99%
Staphylococcus epidermidis	99.9%	99.9%	99.9%
Enterococcus facium	99.9%	99.9%	99.9%
Escherichia coli	99.9%	>99.99%	>99.99%
Pseudomonas aeruginosa	99.9%	99.9%	99.9%
Serratia marcescens	99.9%	99.9%	99.9%
Klebsiella pneumoniae	99.7%	99.8%	99.9%
Candida albicans	99.6%	99.7%	99.8%
Vancomycin Resistant Enterococcus faecalis	94.08%	98.17%	98.67%

Conclusion: *SoftCIDE demonstrated excellent and rapid antimicrobial activity against all gram-negative, gram-positive, and yeast microorganisms tested.*

3. Healthcare Personnel Handwash Test

The purpose of this test is to determine the ability of SoftCIDE to reduce microbial contamination (transient microorganisms) on the hands of human subjects. As opposed to the Kill-Time Study, which is an in vitro test, this is an in vivo test with ten human volunteers.

Test Procedure:

Ten overtly healthy volunteers were assigned to SoftCIDE. After a seven-day pre-test period, during which volunteers avoided medical soaps, lotions, etc., 5 ml of Serratia marcescens was pipetted into the cupped hands of each subject. The subject thoroughly distributed the culture over all surfaces of the hands and allowed the hands to dry for one minute. Sterile latex gloves were then donned and samples were taken using the Glove Juice Sampling Procedure. This constituted the baseline sample.

Hands were then again contaminated with Serratia and allowed to dry. Subjects then washed both hands and forearms with tap water and 5ml of SoftCIDE for 15 seconds. The subject then rinsed the hands with tap water and donned sterile gloves for sampling. This comprised the first wash. Nine more washes then followed the recontamination preceding each wash and sampling following the fourth, seventh, and tenth wash.

4. Minimum Inhibitory Concentration Study

To further determine the effectiveness of SoftCIDE against a broad spectrum of micro-organisms, a Minimum Inhibitory Concentration (MIC) study was conducted. MIC is defined as the minimum amount of test agent that will inhibit visible growth of a specific challenge microorganism strain. Each number below is the minimum amount of Chloro-xylenol, in parts per million (ppm) that needs to be in SoftCIDE to prevent growth of that specific microorganism. As you look at these results, remember that the actual SoftCIDE product has 10,000 ppm of Chloroxylenol.

3. Healthcare Personal Handwash Test Result Data*

Baseline Count	% Reduction Wash #1	% Reduction Wash #3	% Reduction Wash #7	% Reduction Wash #10
4.9 x 108	98.83%	98.88%	98.26%	98.88%

*Results represent the average of all ten subjects.

Conclusion: *SoftCIDE demonstrated excellent immediate and persistent Antimicrobial effectiveness.*

4. Minimum Inhibitory Concentration Study Data*

Test Organisms	Minimum Inhibitory Concentration ppm Chloroxylenol
Staphylococcus aureus	250
Methicillin Resistant Staphylococcus aureus	250
Streptococcus pneumoniae	1,000
Staphylococcus epidermidis	250
Enterococcus facium	1,000
Escherichia coli	250
Pseudomonas aeruginosa	500
Serratia marcescens	500
Klebsiella pneumoniae	1,000
Candida albicans	500

References:

1. Food and Drug Administration, Tentative Final Monograph for Healthcare Antiseptic Drug Products, Federal Register, June 17, 1994; 59:31402-31452.

2. APIC Guideline for Infection Control Practice. Guideline for use of topical antimicrobial agents. 1988.

Ingredient List:

Active Ingredient: Chloroxylenol (PCMX) 1%

Inactive Ingredients: Purified Water USP, Sodium Laureth Sulfate, Cocamidapropyl Betaine, Sodium Lauroyl Sarcosinate, Cocamide DEA, Polysorbate 20, Allantoin, C-12-15 Alkyl Benzoate, Ethoxylated Fatty Acid Complex, Jojoba Oil, Olive Oil, Rice Bran Oil, Polyquaternium-10, Walnut Oil, Tetrasodium EDTA, Quaternium-15, Aloe Vera Oil, Fragrance, Citric Acid.

Item #	Description	Qty./Case
CP21004	4oz. (118 ml) bottle w/ flip-top cap	12
CP21016	16oz. (473 ml) bottle w/ pump-top	6
CP21128	1 gallon (3.78 L) bottle	4