The organisms are prepared by inoculating the surface of Soybean-Casein Digest Agar (TSA) incubated at 32.5 ± 2.5°C for 3 days. Following the incubation period, the plates are washed with sterile Serological Saline Solution to harvest the microorganisms used and dilutions with Saline are made, plated on TSA in duplicate, and incubated at 36 ± 1 °C for 42 hours to determine the concentration. The inoculum level is then adjusted to 10^8 cfu/mL for use as a stock suspension. Stock suspensions are well mixed and homogenized at inoculation for each organism.

The following microorganisms were used in this Kill Time Study to demonstrate the antimicrobial properties of the Blue clay mixture & Hydrogel Component against common pathogenic organisms: Microbiologies Kwik-Stiks Staphylococcus epidemidis ATCC 35984, Escherichia coli ATCC 25922, Candida albicans ATCC 90028, Methicillin Resistant Staphylococcus aureus ATCC 33591, Streptococcus pyogenes ATCC 19615, Pseudomonas aeruginosa 9027, Klebsiella pneumoniae ATCC 10031, and Clostridiodes difficile ATCC 700057.

Using Saline, positive controls are performed by pour plating to enumerate inoculum levels and verify culture purity during testing and Negative controls are performed to establish sterility of media, reagents, and materials used at initiation. Neutralizer Suitability using Dey-Engley reagents, and materials used at initiation.

Fentonite® is a rare earth nano-mineral compound that is found in a single remote location. It provides a precise balance of cationic minerals that are embedded in a low pH illite/smectite matrix that effectively traps and deactivates anions, toxins and pathogens. Fentonite effectively chelates and binds toxins in wound exudate and lowers wound pH to create an environment hostile to pathogenic activity.

The Accession# 28532 Rev 1 indicates a 99.9% log reduction at 12, 24, and 48 hours for Staphylococcus epidemidis ATCC 35984, Escherichia coli ATCC 25922, Candida albicans ATCC 90028, Methicillin Resistant Staphylococcus aureus ATCC 33591, Streptococcus pyogenes ATCC 19615, Pseudomonas aeruginosa 9027, Klebsiella pneumoniae ATCC 10031, and Clostridiodes difficile ATCC 700057.

**PROTOCOL**

**TESTING RESULTS**

**CONCLUSION**

**INVESTIGATORS**

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8/28/22

Pathogen Profile of 81 Year Old Patient Successfully Treated with Fentonite®

Bacterial Load

High > 10^6

Serratia marcescens

Staphylococcus aureus

Acinetobacter baumannii

Streptococcus dysgalactiae

Corynebacterium striatum

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9/29/22

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