

Effectiveness of SURFACE GUARD 90: Long Term Microbial Control in a Care Home Environment

Abstract

The purpose of this study is to determine the effectiveness of the chemical solution SURFACE GUARD 90 (*3-(Trimethoxysilyl) propyl di methyloctadecyl ammonium chloride*; diluted to 0.5%) on killing and preventing bacteria over a 45-day period. Initial and post microbiological swab tests were performed 45 days apart. Areas treated with SURFACE GUARD 90 had an average reduction in CFU (colony forming unit) of 99.875%.

The samples were taken from Beacon Ave Care Home in Florida. Samples of bacteria counts were taken from the following items: Door knob, bathroom light switch, toilet support left handle, restroom door, hand rail, Lazy Boy controller, Love Seat, Love Seat cushions, dining room chair

Findings

Microbiological analysis of 13 swabs taken prior to the application of SURFACE GUARD 90 resulted in bacteria counts ranging from 52,000-860 cfu/swab, with an average of 27,727 cfu/swab.

Microbiological analysis of 13 swabs taken after the application of SURFACE GUARD 90 resulted in bacteria counts ranging from <1-80 cfu/swab, with an average of 34.4 cfu/swab.

The result is a decrease in CFU by 99.875%.

Conclusion

SURFACE GUARD 90 is effective in killing CFU and maintaining an acceptably low CFU count.