

ANTIBACTERIAL TEST REPORT

PROCEDURE

Quantitative Antibacterial Assessment:

ISO 22196:2011 was used to quantitatively test the specimen for antibacterial activity. In brief:

1. The sample was placed into a container with a lid.
2. A 0.3 mL inoculum of *Klebsiella pneumoniae* (ATCC #4352) was placed, in microdroplets, on the surface of the samples.
3. The specimen was incubated 24 hours at 37C.
4. 20 mL of Lethen broth was added to the container and shook. The liquid was plated using dilution techniques.
5. The “Value of Antimicrobial Activity” was carried out using the formula $R = [\log (B/C)]$

Where:

R= value of antimicrobial activity

B = Average of the number of viable cells of bacteria on the untreated test piece / inoculum control after 24 hours

C = Average of the number of viable cells of bacteria on the antimicrobial test piece after 24 hours

RESULTS

| Quantitative Assessment of Activity - ISO 22196:2011 | | | | | |
|--|---|-------------------------|-------------------------------|----------------|-------------|
| <i>K. pneumoniae</i> | | | | | |
| Concentration of starting inoculum | | | 9.40 x 10 ⁵ CFU/mL | | |
| Sample Description | | No. Bacteria Recovered | Log Value | R = [log(B/C)] | % Reduction |
| 1 | Safe pad coating Standard, Coated plaques – Painted brown coating | 3.37 x 10 ⁵ | 5.5 | --- | --- |
| 2 | Safe pad coating + AMC Additive, Coated plaques – Painted brown coating | <2.00 x 10 ¹ | <1.3 | >4.2 | >99.9% |
| Inoculum Control | | 7.95 x 10 ⁶ | 6.9 | --- | --- |

Note: The level of treatment stated above indicates theoretical levels only.

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