

18 Sep, 2023

Plastpur

PAQ #5017

Antimicrobial Assessment of One Foam Sample

380918

One foam sample, treated with Ultra-Fresh DW-30, was received from Plastpur at Microban Canada Inc., the sample was tested for antimicrobial activity using a quantitative test method.

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 *Staphylococcus aureus* (ATCC #6538) was placed, in microdroplets, on the surface of the samples. Sterile films were placed over the inoculum to encourage good contact.
3. The specimen was incubated for 24 hours at 37C.
4. 20 mL of Letheen 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

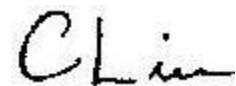
B = Average of the number of viable cells of bacteria on the untreated test piece after 24 hours

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

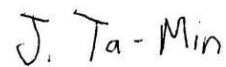
RESULTS

Quantitative Assessment of Activity - ISO 22196:2011 <i>S. aureus</i>				
Concentration of starting inoculum		1.63 x 10 ⁵		
Sample Description	No. Bacteria Recovered	Log Recovery	Log Reduction	% Reduction
1 Foam	<2.00 x 10 ¹	<1.3	>3.9	>99.9%
Inoculum Control	1.58 x 10 ⁵	5.2	--	--

Microban Canada Inc.



Microbiology Manager



Microbiologist

END OF REPORT