

INTERNATIONAL STANDARD ISO-22196:2007

Plastics – Measurement of antibacterial activity on plastics surfaces

Test report

1. Date of commencement of the experiments 20/09/2011
2. Date of the test report 26/09/2011
3. Type of material used:

	Product	Name	Reference
a. Treated test specimens	Shower tray	Arandipur	Antimicrobial
b. Untreated test specimens	Shower tray	Arandipur	Control
c. Size of the test specimens:	50x50 mm		
d. Shape of test specimens:	2.500 mm ²		
e. Thickness of the test specimens:	12 mm		
4. Polymer used for the cover film:

a. Type of polymer:	Polyethylene
b. Size of the film:	40x40 mm
c. Shape of the film:	1.600 mm ²
d. Thickness of the film:	0,1 mm
5. Microorganisms:

a. Bacteria 1:	Staphylococcus aureus ATCC 6538P
b. Bacteria 2:	Escherichia coli ATCC 8739
6. Volume of test inoculums used: 0,4 ml
7. Number of viable bacteria in the test inoculums:

a. Staphylococcus aureus ATCC 6538P	4,10 log (ufc/cm ²)
b. Escherichia coli ATCC 8739	4,39 log (ufc/cm ²)
8. Values:

a. Arandipur shower tray		Staphylococcus aureus ATCC 6538P	
i. U0:	=	3,69	log ufc/cm ²
ii. Ut:	=	6,97	log ufc/cm ²
iii. At:	=	1,80	log ufc/cm ²
b. Arandipur shower tray		Escherichia coli ATCC 8739	
i. U0:	=	3,95	log ufc/cm ²
ii. Ut:	=	6,97	log ufc/cm ²
iii. At:	=	1,80	log ufc/cm ²
9. Antibacterial activity calculated:

a. Staphylococcus aureus ATCC 6538P	=	4,10	log ufc/cm ²
b. Escherichia coli ATCC 8739	=	4,39	log ufc/cm ²
10. Cleaning procedure: Isopropyl Alcohol during 1 minutes
11. Conclusions:

The analyzed samples presented a significant antimicrobial activity, in agreement with the ISO-22196:2007 norm, after the use of Staphylococcus aureus ATCC 6538P and Escherichia coli ATCC 8739.



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