

Messrs.
STERYLAB S.r.l.
Via Magenta, 77/6
20017 RHO (MI)

Zola Predosa, 14th July, 2008

Rif. Your order n. 1259-A/FZ of February 01st 2008

TEST REPORT N° 1556/08
EFFICACY TEST

TEST SAMPLE:

- Denomination: **ANTIMICROBIAL & ANTIFUNGAL STICKY MAT (wafer of 30 layers)**
- Code: MULTIMAT MMB45
- Lot: 0068-07
- Sterilization: N.A.
- Sampling carried out by: STERYLAB S.r.l.
- Receipt number: 071009-06
- Receipt date: 09/10/2007

Test date: from 12/05/2008 to 21/05/2008, from 03/06/2008 to 10/06/2008 and from 30/06/2006 to 04/07/2008.

References: ASTM E 2180 - 01 "Standard Test Method for Determining the Activity of Incorporated Antimicrobial Agent(s) In Polymeric or Hydrophobic Materials"

Summary of practice: both sticky mat with and without benzoisothiazoline 3-one (Treated test material - MULTIMAT and Control test material - Common mat) are cut into 3,0 cm x 3,0 cm square pieces. A standardised bacterial culture (1×10^6 cell/ml) is placed onto the treated and control samples. The count of the bacterial colonies grown is made at time "0" (immediately after sowing) and after a 24 h incubation period. For each microorganism the test is made in triplicate both for treated and control test materials, at time "0" and after a 24 h incubation period. The results are expressed as percent bacterial reduction in treated sample versus control test material.

Micro-organism used for the test:

- *Corynebacterium striatum* ATCC BAA-1293
- *Enterococcus faecalis* ATCC 29212 NA
- *Staphylococcus aureus* ATCC BAA-811 (MRSA)
- *Candida tropicalis* ATCC MYA-3404
- *Escherichia coli*
- *Enterococcus faecalis* (VRE) ATCC 700221 NA
- *Acinetobacter baumannii* ATCC BAA-747
- *Aspergillus fumigatus* ATCC MYA-3626
- *Stenotrophomonas maltophilia* ATCC 13270

RESULTS AFTER 0 h

	Common mat Control test material average ufc/ml	MULTIMAT Treated test material average ufc/ml	% red.
<i>Corynebacterium striatum</i>	3733333	1616667	56,70
<i>Enterococcus faecalis</i>	2900000	2200000	24,14
MRSA	4133333	2966667	28,23
<i>Candida tropicalis</i>	3866667	2600000	32,76
<i>E. coli</i>	3533333	3333333	5,66
VRE	3033333	2233333	26,37
<i>Acinetobacter baumannii</i>	540000	346667	35,80
<i>Aspergillus fumigatus</i>	46000	44000	4,35
<i>Stenotrophomonas maltophilia</i>	343333	290000	15,53

RESULTS AFTER 24 h

	Common mat Control test material average ufc/ml	MULTIMAT Treated test material average ufc/ml	% red.
Corynebacterium striatum	89333	3340	96,26
Enterococcus faecalis	983333	9857	99,00
MRSA	2526667	202333	91,99
Candida tropicalis	3566667	2593333	27,29
E. coli	2166667	0	100,00
VRE	820000	686667	16,26
Acinetobacter baumannii	1900000	0	100,00
Aspergillus fumigatus	24000	2033	91,53
Stenotrophomonas maltophilia	0	0	/

The present test report is exclusively referred to the tested sample.
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Test carried out by: Lorena Bongiovanni, Dr.

Issue authorized by:
Study Director Giovanni Bassini, Eng. Ch.

