

IMSL

INDUSTRIAL MICROBIOLOGICAL SERVICES LTD

STUDY REPORT: **Determination of Antibacterial Activity against Methicillin Resistant *Staphylococcus aureus* (MRSA) using a Zone of Inhibition Method.**

MBE 258A

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1 Introduction

This report summarises a study performed to assess the antibacterial properties of samples formulated either with or without Microban against Methicillin Resistant *Staphylococcus aureus*.

2 Test Materials

Samples were supplied by Microban Europe Ltd. The samples were held at 20°C in the dark prior to testing.

3 Method

Antibacterial activity was determined using a zone of inhibition test.

3.1 Determination of Antibacterial Activity

An aliquot (200 µl) of a log phase cell suspension of Methicillin Resistant *Staphylococcus aureus* (*ca* 5×10^8 cells ml⁻¹) was spread over the surface of an agar plate (Trypcase Soya Agar). The samples were then placed on to the surface of the inoculated agar. The plates were incubated at 37°C for 24 hours and then inspected for growth up to and under the test samples and for the presence of any zone of inhibition surrounding the samples. The samples were then imaged photographically.

4 Results / Discussion

The results are shown in Table 1 and Plates 1 - 2 below.

Table 1: Results of testing

Sample	Zone (mm)
	MRSA
Gelcoat 65PA - White 337 (Control)	0
Crystic 65PA White 337 - Microban	4

Plate 1: Gelcoat 65PA White 337 (Control) - MRSA

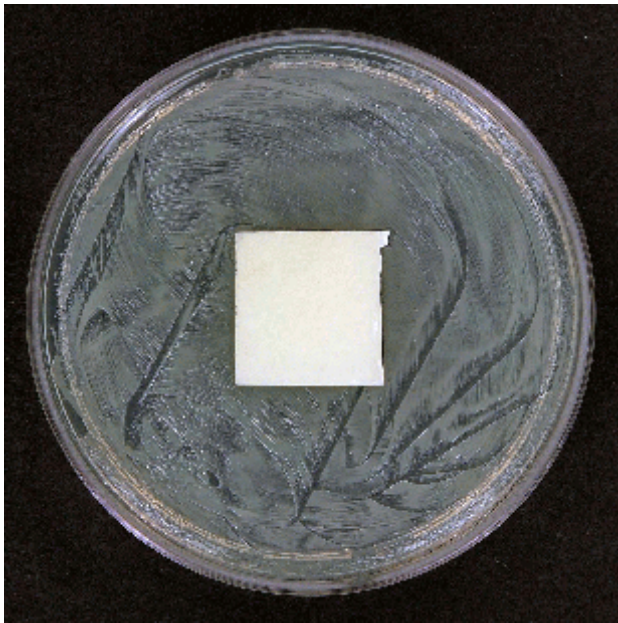
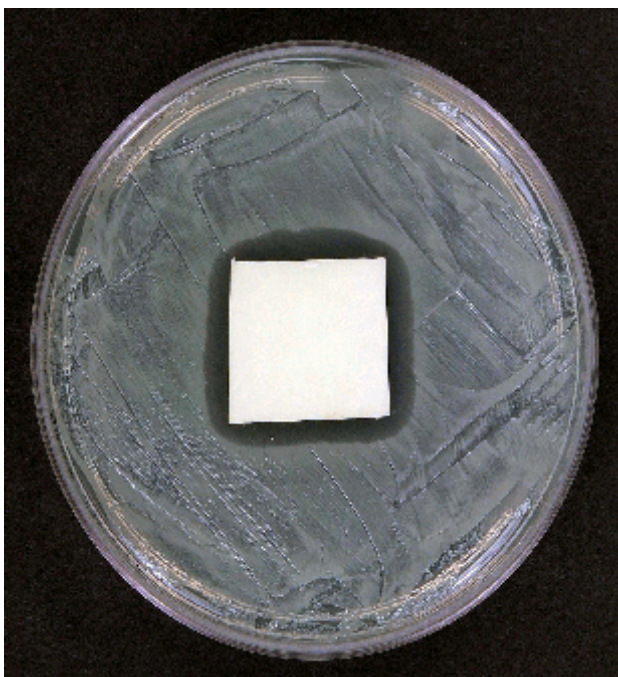


Plate 2: Crystic 65PA White 337 Microban - MRSA



5 Raw Data

The raw data for this study will be held in file IMSL LRN 1013873 in the Archive of IMSL at Pale Lane, Hartley Wintney, Hants, RG27 8DH, UK for 6 years from the date of this report unless other specific instructions are given.

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