

Report Reference: Deflecto Europe - 0001

Client: Deflecto Europe
Date: 07/04/2020

Material Tested: GPPS HIPS with ST10210 @ 2%

Test Laboratory: Anti-Microbial Test Division, Kyoto Biseibutsu Kenkyusyo

Yamashina-ku, Kyoto 607-8482, Japan

Evaluation of the antimicrobial performance of samples containing antimicrobial additives. All testing is conducted by an independent laboratory using the ISO 22196 / JIS Z 2801:2000 test method.

Introduction

This report details the analysis carried out on the test samples, including an overview of the test method, the test results, an interpretation of those results and copies of the associated laboratory certificates.

Test samples

Where possible, all test materials are taken from samples of the actual product. Samples typically measure 50mm x 50mm, as specified by the JIS Z 2801:2000 method, although where this is impractical it is permissible to use smaller samples with the method being modified accordingly.

Sample Ref.	Description
Control	Untreated polyethylene film
53522-A	GPPS HIPS with ST10210 @ 2%
53522-B	GPPS HIPS with ST10210 @ 2%

Test method

The samples were tested according to the JIS Z 2801:2000 method, briefly summarised as follows;

Each test sample is inoculated with a suspension of the test organism (for example, MRSA). The inoculum is held in contact with the test sample using a sterile polyethylene film. All test samples are inoculated in triplicate, with an additional three replicates of the control.

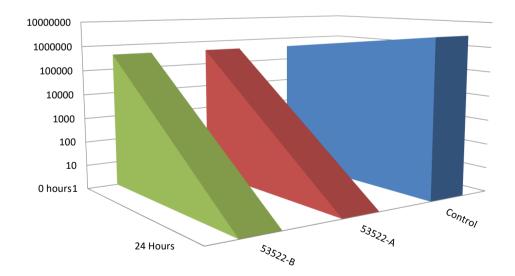
The bacterial population on three control replicates is evaluated immediately following inoculation. This is assumed to be the initial population on all test samples (i.e. the population at zero hours).

The remaining samples are incubated for the test period (24 Hours) at 35°C, at which time the bacterial population is evaluated.



MRSA (Methicillin Resistant Staphylococcus aureus)

Tested at 35°C		Number of live organisms (Colony Forming Units)		% reduction of Colony Forming Units, expressed as comparison with control	l
Sample		0 hours	24 Hours	as companison with control	1
Control	Untreated polyethylene film	410000	3300000	N/A	
53522-A	GPPS HIPS with ST10210 @ 2%	410000	<10	>99.9996% Reduction	EXCELLENT
53522-B	GPPS HIPS with ST10210 @ 2%	410000	<10	>99.9996% Reduction	EXCELLENT





Escherichia coli

Tested at 35°C		Number of live organisms (Colony Forming Units)		% reduction of Colony Forming Units, expressed as comparison with control	
Sample		0 hours	24 Hours	as companison with control	
Control	Untreated polyethylene film	475000	19100000	N/A	
53522-A	GPPS HIPS with ST10210 @ 2%	475000	1390	99.992% Reduction	EXCELLENT
53522-B	GPPS HIPS with ST10210 @ 2%	475000	<10	>99.99994% Reduction	EXCELLENT

