

TEST REPORT: 7191373145-CHM26-01-WMY

Date: 04 FEB 2026

Email: joanne.wee@tuvsud.com

Client's Ref: -

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SUBJECT

Antibacterial Activity Evaluation

CLIENT

Duprex Singapore Pte Ltd
Blk 5042 Ang Mo Kio Industrial Park 2
#01-509
Singapore 569545

SAMPLE SUBMISSION DATE / TEST DATE

19 Jan 2026 / 27 Jan 2026

DESCRIPTION OF SAMPLE

One sample of panel described as below was submitted:

Product Type : Antimicrobial Treated Bin Liners

Brand : Cheerie

Manufacturer / Supplier : Duprex Singapore Pte Ltd



Laboratory:
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TÜV SÜD @ IBP
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Singapore 609937

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METHOD OF TEST

Based on ISO 22196 : 2011 "Measurement of antibacterial activity on plastics and other non-porous surfaces".

The test microorganisms used was :

Escherichia coli (ATCC 8739)
Staphylococcus aureus (ATCC 6538P)

Size of test material: 5 cm x 5 cm

Size of film: 4 cm x 4 cm polyethylene film

Volume of test inoculum : 0.2 ml



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RESULTS

Test microorganism (Bacterial cells inoculated per test piece)	Average of the number of viable cells of test microorganism per test piece		Value of Antibacterial Activity (Criteria : Not less than 2.0)
<i>Escherichia coli</i> (ATCC 8739)	0 hour	24 hours	
Control	110 000	15 000 000	-
Antimicrobial Treated Bin Liners	-	Less than 10	More than 6.17

Test microorganism (Bacterial cells inoculated per test piece)	Average of the number of viable cells of test microorganism per test piece		Value of Antibacterial Activity (Criteria : Not less than 2.0)
<i>Staphylococcus aureus</i> (ATCC 6538P)	0 hour	24 hours	
Control	120 000	14 000 000	-
Antimicrobial Treated Bin Liners	-	13	6.05

Remarks :

The antibacterial product is determined that it has the antibacterial effectiveness, when the antibacterial activity thereof obtained according to the testing method of this standard is 2.0 or more. Based on the test results, the sample is considered to have the antibacterial effectiveness when tested using *Staphylococcus aureus* (ATCC 6538P) and *Escherichia coli* (ATCC 8739).

The above test results relate to the sample(s) as received.

A handwritten signature in black ink, appearing to read "Hwee Ying".

MS AW HWEE YING
SENIOR TECHNICAL EXECUTIVE

A handwritten signature in black ink, appearing to read "Joanne Wee".

DR JOANNE WEE
EXECUTIVE MICROBIOLOGIST II
MICROBIOLOGY
CHEMICAL CENTRE





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Effective 27 March 2024