Date:

27 MAY 2010

Tel: +65 68851346 Fax: +65 67732912

Client's Ref: -

Email: Yin-Pheng.LEONG@tuv-sud-psb.sg

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SUBJECT

Bactericidal Activity Test

PSB Singapore

Choose certainty.

Add value.

CLIENT

SAMPLE SUBMISSION DATE / TEST DATE

14 May 2010 / 24 May 2010

DESCRIPTION OF SAMPLE

One sample of antibacterial solution as follows:

Product Description

Bactakleen Anti bacteria

Company Description

Quantity : 1 bottle



Laboratory: TÜV SÜD PSB Pte. Ltd. No.1 Science Park Drive Singapore 118221



LA-2007-0380-A LA-2007-0380-A-1 LA-2007-0381-F LA-2007-0382-B LA-2007-0384-G LA-2007-0385-E LA-2007-0386-C

The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council - Singapore Laboratory Accreditation Scheme Tests/Calibrations marked 'Not SAC-SINGLAS Accredited" in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our laboratory.

Phone : +65-6885 1333 Fax : +65-6776 8670 E-mail: testing@tuv-sud-psb.sg www.tuv-sud-psb.sg Co. Reg : 199002667R Regional Head Office: TÜV SÜD Asia Pacific Pte. Ltd. 3 Science Park Drive, #04-01/05 The Franklin, Singapore 118223

27 MAY 2010



METHOD OF TEST

BS EN 1040 : 2005

"Chemical disinfectants and antiseptics – Quantitative suspension test for the evaluation of basic bactericidal activity of chemical disinfectants and antiseptics – Test method and requirements (Phase 1)".

The test microorganisms used were:

Staphylococcus aureus (ATCC 6538) Pseudomonas aeruginosa (ATCC 15442)



RESULTS

Bactakleen Anti bacteria Product Description : Test Microorganism : Staphylococcus aureus (ATCC 6358)

Dilution /	Initial Count of Test Microorganism per ml of Test Mixture	t Microorganism st Mixture	Count of Surviving Test Microorganism per ml	rviving Test ism per ml	Log Reduction	Percentage Kill of
Contact Illie	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀		l est Microorganism
Neat		1			1	
5 Minutes	320 000 000	8.5	Less than 10	Less than 1	More than 7.5	More than 99,99997

Test Microorganism : Pseudomonas aeruginosa (ATCC 15442)

Dilution /	Initial Count of Test Microorganism per ml of Test Mixture	t Microorganism st Mixture	Count of Surviving Test Microorganism per ml	rviving Test ism per ml	Log Reduction	Percentage Kill of
Contact IIIne	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀		l est Microorganism
Neat 5 Minutes	46.000	7.9	Loce than 10	Loce than 1	More than 6.2	More than ag aggg

Notes:

CFU : Colony Forming Unit

27 MAY 2010



Remarks:

The product shall be deemed to have passed the test if it demonstrates a 5 Log reduction or more (at least >99.999% kill) in viability within 5 minutes or less under the conditions defined by this test when the test organisms are *Staphylococcus aureus* and *Pseudomonas aeruginosa*.

This test method evaluates the basic bactericidal activity of chemical disinfectants with no specific application. It does not evaluate the activity of a product for an intended use. More specific test methods are used for further assessment of the efficacy of chemical disinfectants and antiseptics for a defined purpose.

The above test results relate to the sample as received.

MS AW HWEE YING

TECHNICAL EXECUTIVE

MRS KAM-LEONG YIN PHENG

PRODUCT MANAGER MICROBIOLOGY

CHEMICAL & MATERIALS

27 MAY 2010



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March 2010

TEST REPORT: 7191136755-CHM16-01-RC

Date: 27 APR 2016

Tel: +65 68851345 Fax: +65 67732912

Client's Ref:

Email: Randy.CHIN@tuv-sud-psb.sg

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Choose certainty.
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SUBJECT

Antimicrobial Activity Evaluation

CLIENT

Attn: Nicholas

SAMPLE SUBMISSION DATE/ TEST DATE

07 Apr 2016 / 07 Apr 2016

DESCRIPTION OF SAMPLE

One liquid sample labelled as "Bactakleen Anti Bacteria" was submitted.

METHOD OF TEST

BS EN 1040: 2005

"Chemical disinfectants and antiseptics – Quantitative suspension test for the evaluation of basic bactericidal activity of chemical disinfectants and antiseptics – Test method and requirements (Phase 1)".

The test microorganisms used were:

Staphylococcus aureus (ATCC 6538) Pseudomonas aeruginosa (ATCC 15442)

Dilution tested : Neat Contact time : 5 minutes



Laboratory: TÜV SÜD PSB Pte. Ltd. No.1 Science Park Drive Singapore 118221 Phone : +65-6885 1333 Fax : +65-6776 8670 E-mail: testing@tuv-sud-psb.sg www.tuv-sud-psb.sg Co. Reg : 199002667R

Regional Head Office: TÜV SÜD Asia Pacific Pte, Ltd. 3 Science Park Drive, #04-01/05 The Franklin, Singapore 118223

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TEST REPORT: 7191136755-CHM16-01-RC 27 APR 2016



"Bactakleen Anti Bacteria" RESULTS Product Name

Test Microorganism : Staphylococcus aureus (ATCC 6538)

rest witchoolgailisill	More than 6.63 More than 99.99998
	More than 6.63
Log10	Less than 1
CFU per ml	Less than 10
Log10	7,63
CFU per mi	43 000 000
Condet time	Neat 5 minutes
	CFU per mi Log ₁₀ CFU per mi Log ₁₀

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Percentage Kill of Test Microorganism		More than 7.11 More than 99.99992	
Log Reduction	Log Reduction		More than 7.11
viving Test sm per ml	Logia		Less than 1
Count of Surviving Test Microorganism per ml	CFU per mi	2	Less than 10
Initial Count of Test Microorganism per ml of Test Mixture	Logno	7	8.11
	CFU per mi	1	130 000 000
Concentration	Concentration / Contact Time		5 minutes

TEST REPORT: 7191136755-CHM16-01-RC

27 APR 2016



Remarks:

The product shall be deemed to have passed the test if it demonstrates a **5 Log reduction or more** (at least >99.999% kill) in viability within 5 minutes or less under the conditions defined by this test when the test organisms are *Staphylococcus aureus* and *Pseudomonas aeruginosa*.

This test method evaluates the basic bactericidal activity of chemical disinfectants with no specific application. It does not evaluate the activity of a product for an intended use. More specific test methods are used for further assessment of the efficacy of chemical disinfectants and antiseptics for a defined purpose.

The above test results relate to the sample as received.

MS AW HWEE YING HIGHER TECHNICAL EXECUTIVE MR RANDY CHIN KOK FEI
ASSISTANT PRODUCT MANAGER
MICROBIOLOGY
CHEMICAL & MATERIALS

TEST REPORT: 7191136755-CHM16-01-RC

27 APR 2016



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