

TEST REPORT: 7191037096-CHM12-LYP

Date: 02 JUL 2012

Tel: +65 68851346 Fax: +65 67732912

Client's Ref: PO No. DD201206202P Email: Yin-Pheng.LEONG@tuv-sud-psb.sg

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SUBJECT

Antimicrobial Activity of Disinfectant Solution

CLIENT

DD Solution (S) Pte Ltd
18 Boon Lay Way
#04-143, Tradehub 21
Singapore 609966

Attn : Jimmy Dai

SAMPLE SUBMISSION DATE/ TEST DATE

26 Jun 2012/ 26 Jun 2012

DESCRIPTION OF SAMPLE

One sample was submitted and labelled as "DD solution".

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)
Listeria monocytogenes (ATCC 7644)
Salmonella typhimurium (ATCC 14028)
Escherichia coli (NCTCC 12900)



TÜV SÜD PSB

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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RESULTS

Product Name : "DD Solution"

Test Microorganism : *Staphylococcus aureus* (ATCC 6538)

Concentration / Contact Time	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of Test Microorganism
	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀		
Neat						
5 Minutes	100 000 000	8	5 500 000	6.74	1.26	94.5
15 Minutes	100 000 000	8	2 500 000	6.40	1.60	97.5
30 Minutes	100 000 000	8	1 400 000	6.15	1.85	98.6

Test Microorganism : *Pseudomonas aeruginosa* (ATCC 15442)

Concentration / Contact Time	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of Test Microorganism
	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀		
Neat						
5 Minutes	95 000 000	7.98	1 200 000	6.08	1.90	98.7
15 Minutes	95 000 000	7.98	1 100 000	6.04	1.94	98.8
30 Minutes	95 000 000	7.98	1 100 000	6.04	1.94	98.8

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RESULTS (Cont'd)

Product Name : "DD Solution"

Test Microorganism : *Listeria monocytogenes* (ATCC 7644)

Concentration / Contact Time	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of Test Microorganism
	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀		
Neat						
5 Minutes	170 000 000	8.23	60 000	4.78	3.45	99.96
15 Minutes	170 000 000	8.23	44 000	4.64	3.59	99.97
30 Minutes	170 000 000	8.23	31 000	4.49	3.74	99.98

Test Microorganism : *Salmonella typhimurium* (ATCC 14028)

Concentration / Contact Time	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of Test Microorganism
	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀		
Neat						
5 Minutes	160 000 000	8.20	130 000	5.11	3.09	99.92
15 Minutes	160 000 000	8.20	110 000	5.04	3.16	99.93
30 Minutes	160 000 000	8.20	110 000	5.04	3.16	99.93

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RESULTS (Cont'd)

Product Name : "DD Solution"

Test Microorganism : *Escherichia coli* (NCTC 12900)

Concentration / Contact Time	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of Test Microorganism
	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀		
Neat						
5 Minutes	120 000 000	8.08	1 500 000	6.18	1.90	98.75
15 Minutes	120 000 000	8.08	1 000 000	6.00	2.08	99.17
30 Minutes	120 000 000	8.08	890 000	5.95	2.13	99.26

Notes :

CFU : Colony Forming Unit



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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.

Handwritten signature of MS AW HWEE YING in black ink.

MS AW HWEE YING
TECHNICAL EXECUTIVE

Handwritten signature of MRS KAM-LEONG YIN PHENG in black ink.

MRS KAM-LEONG YIN PHENG
PRODUCT MANAGER
MICROBIOLOGY
CHEMICAL & MATERIALS





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July 2011

