



# Abbott Analytical

Consulting Scientists to the Disinfectant Industry



## Certificate of Analysis

**Sample(s):** One sample of Cleenol Alcohol Free Hand Sanitiser

**Received from:** Cleenol Group Ltd. Beaumont Road, Banbury, OX16 1RB

**Date received:** 16 November 2011      **Date tested:** 21 November 2011

**Certificate no:** 11L.037B.CLG      **Certificate date:** 25 November 2011

**Sample ref:** 11L/037      **Page:** 1 of 3

**Analysis required:** EN 1276, Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)

**Product stored at:** Room temperature

**Active substance:** Not declared

**Test conditions:** Dirty

**Interfering substance:** 3.0g/l bovine albumin

**Product test concentration:** Neat as received  
(80% in test suspension)

**Product diluent used during test:** N/A

**Contact time:** 1 minute & 5 minutes

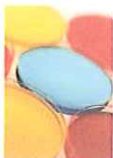
**Test temperature:** 20°C ± 0.5°C

**Neutralising solution:** 30g/l polysorbate 80, 3g/l lecithin, 1g/l histidine, 1g/l cysteine

**Incubation temperature:** 37°C ± 1°C

**Identification of bacterial strain(s) used:** Methicillin-resistant      NCTC 12493  
*Staphylococcus aureus*

  
D C Watson



# Abbott Analytical



Consulting Scientists to the Disinfectant Industry

25 November 2011

Certificate No: 11L.037B.CLG

Page: 2 of 3

## Test results: Contact time 1 minute

Test Organism	MRSA	
Validation Suspension (N <sub>v</sub> )	Vc1 106	Vc2 134
	$\bar{x} = 120$	
Experimental Control (A)	Vc1 112	Vc2 128
	$\bar{x} = 120 \geq 0.5N_{v_0}$	
Neutraliser Control (B)	Vc1 104	Vc2 142
	$\bar{x} = 123 \geq 0.5N_{v_0}$	
Method Validation (C)	Vc1 130	Vc2 114
	$\bar{x} = 122 \geq 0.5N_{v_0}$	
Test Suspension (N)	Vc1 224	Vc2 268
10 <sup>-6</sup>		
10 <sup>-7</sup>	Vc1 34	Vc2 25
	$\bar{w} = 2.50 \times 10^8$	
	lg N = 8.40	
(N <sub>0</sub> = 0.1N)	lg N <sub>0</sub> = 7.40	
Results (Na)	Vc1 11	Vc2 15
	10 $\bar{x}$ < 150	
	lg Na < 2.18	
(R)	lg R > 5.22	
Pass: lg R ≥ 5	PASS	

Vc = plate count per ml  
 $\bar{x}$  = average of Vc1 and Vc2  
 $\bar{w}$  = weighted mean of  $\bar{x}$   
R = reduction (lg R = lg N<sub>0</sub> - lg Na)

### Requirements & Conclusion:

This batch of Cleenol Alcohol Free Hand Sanitiser, when used neat, passes the requirements of EN 1276 for bactericidal activity in 1 minute at 20°C under dirty conditions against the reference organism detailed.

D C Watson

D C Watson BSc, CBiol, MSB, MIFST, ACIEHO  
PO Box 95, New Ferry, Wirral, CH62 6HA  
Tel: 0151 637 3331 Mob: 07767 871275  
email: abbottanalytical@hotmail.co.uk



# Abbott Analytical



Consulting Scientists to the Disinfectant Industry

25 November 2011

Certificate No: 11L.037B.CLG

Page: 3 of 3

## Test results: Contact time 5 minutes

Test Organism	MRSA	
Validation Suspension (N <sub>v</sub> )	Vc1 106	Vc2 134
	$\bar{x} = 120$	
Experimental Control (A)	Vc1 112	Vc2 128
	$\bar{x} = 120 \geq 0.5N_{v_0}$	
Neutraliser Control (B)	Vc1 104	Vc2 142
	$\bar{x} = 123 \geq 0.5N_{v_0}$	
Method Validation (C)	Vc1 130	Vc2 114
	$\bar{x} = 122 \geq 0.5N_{v_0}$	
Test Suspension (N)	10 <sup>-6</sup> Vc1 224	Vc2 268
	10 <sup>-7</sup> Vc1 34	Vc2 25
	$\bar{w} = 2.50 \times 10^8$	
	lg N = 8.40	
(N <sub>0</sub> = 0.1N)	lg N <sub>0</sub> = 7.40	
Results (Na)	Vc1 0	Vc2 0
	10 $\bar{x}$ < 140	
	lg Na < 2.15	
(R)	lg R > 5.25	
Pass: lg R $\geq$ 5	PASS	

Vc = plate count per ml  
 $\bar{x}$  = average of Vc1 and Vc2  
 $\bar{w}$  = weighted mean of  $\bar{x}$   
R = reduction (lg R = lg N<sub>0</sub> - lg Na)

## Requirements & Conclusion:

This batch of Cleenol Alcohol Free Hand Sanitiser, when used neat, passes the requirements of EN 1276 for bactericidal activity in 5 minutes at 20°C under dirty conditions against the reference organism detailed.

D C Watson

D C Watson BSc, CBiol, MSB, MIFST, ACIEHO  
PO Box 95, New Ferry, Wirral, CH62 6HA  
Tel: 0151 637 3331 Mob: 07767 871275  
email: abbotanalytical@hotmail.co.uk