



Abbott Analytical

Consulting Scientists to the Disinfectant Industry



Certificate of Analysis

Sample(s): One sample of Remuvit Concentrate

Received from: Klenitise Ltd. 14 Cherry Grove, Sketty, Swansea, SA2 8AS

Date received: 16 May 2011 **Date tested:** 8 June 2011

Certificate no: 11E.040Eo-KR.CLE **Certificate date:** 10 June 2011

Sample ref: 11E/040 **Page:** 1 of 2

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: 20% v/v

Product diluent used during test: Sterile hard water 300mg/l CaCO₃

Contact time: 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: *Escherichia coli* O157:H7 NCTC 12900

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Test results:

Test Organism	<i>Escherichia coli O157:H7</i>	
Validation Suspension (N_v)	Vc1 108	Vc2 132
	$\bar{x} = 120$	
Experimental Control (A)	Vc1 96	Vc2 104
	$\bar{x} = 100 \geq 0.5N_{v_0}$	
Neutraliser Control (B)	Vc1 94	Vc2 82
	$\bar{x} = 88 \geq 0.5N_{v_0}$	
Method Validation (C)	Vc1 106	Vc2 86
	$\bar{x} = 96 \geq 0.5N_{v_0}$	
Test Suspension	10^{-6} Vc1 244	Vc2 230
	10^{-7} Vc1 30	Vc2 26
(N)	$\bar{w} = 2.41 \times 10^8$	
	lg N = 8.38	
(N₀ = 0.1N)	lg N ₀ = 7.38	
Results	Vc1 0	Vc2 0
	$10\bar{x} < 140$	
(Na)	lg Na < 2.15	
(R)	lg R > 5.24	
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 N₀ - lg Na)

Conclusion:

This batch of Remuvit Concentrate, when diluted to 20% v/v, passes the requirements of EN 1276 for bactericidal activity in 5 minutes at 20°C under dirty conditions against the reference organism detailed.

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