



Abbott Analytical



Consulting Scientists to the Disinfectant Industry

Certificate of Analysis

Sample(s): One sample of GreenGold Concentrate

Received from: Busy Cleaning Ltd, Charter Court, Phoenix Way, Swansea, SA7 9FS

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 GreenGold 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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