



Abbott Analytical



Consulting Scientists to the Disinfectant Industry

Certificate of Analysis

Sample(s) : One sample of Remuvit

Received from: Klenitise Ltd. Unit 59, Vale Business Park, Llandow,
Cowbridge, CF71 7PF

Date received: 11 November 2009 **Date tested:** 12 November 2009

Certificate no: 09L.063S-KR.ENZ **Certificate date:** 16 November 2009

Sample ref: 9L/063 **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: 10.0% 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:** *Salmonella typhimurium* ATCC 14028
Listeria monocytogenes NCTC 11994

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Test results:

| Test Organism | <i>Salmonella typhimurium</i> | | <i>Listeria monocytogenes</i> | |
|-----------------------------|-------------------------------|----------------------------|-------------------------------|--|
| Validation Suspension | 10 ⁻¹ | Vc1 366 Vc2 382 | Vc1 254 Vc2 242 | |
| | | Nv0 3.74 x10 ³ | Nv0 2.48 x10 ³ | |
| Experimental Control | 10 ⁰ | Vc1 333 Vc2 370 | Vc1 222 Vc2 208 | |
| | | A 3.52 x10 ² | A 2.15 x10 ² | |
| Neutraliser Control | 10 ⁰ | Vc1 380 Vc2 322 | Vc1 252 Vc2 230 | |
| | | B 3.51 x10 ² | B 2.41 x10 ² | |
| Method Validation | 10 ⁰ | Vc1 346 Vc2 318 | Vc1 288 Vc2 216 | |
| | | C 3.32 x10 ² | C 2.52 x10 ² | |
| Test Suspension | 10 ⁻⁶ | Vc1 292 Vc2 188 | Vc1 454 Vc2 572 | |
| | 10 ⁻⁷ | Vc1 23 Vc2 30 | Vc1 63 Vc2 66 | |
| | | N 2.53 x10 ⁸ | N 5.79 x10 ⁸ | |
| Results | 10 ⁻² | Vc 0 | Vc 0 | |
| | | Na < 1.00 x10 ² | Na < 1.00 x10 ² | |
| | | R > 2.53 x10 ⁶ | R > 5.79 x10 ⁶ | |
| Log ₁₀ Reduction | > 6.40 | | > 6.76 | |

Vc = Viable count

Nv = cfu/ml in the validation suspension

N = cfu/ml in the test suspension

Na = cfu/ml in the test mixture

R = Reduction in viability

Requirements & Conclusion:

To pass EN 1276 a log₁₀ reduction of at least 5 is required.

This batch of Remuvit, when diluted to 10.0% v/v, passes the requirements of EN 1276 for bactericidal activity in 5 minutes at 20°C under 'dirty' conditions against the reference organisms detailed.

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