ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



Food/Pharmaceutical Division

CERTIFICATE OF ANALYSIS

Work Order : FM1107876 Page : 1 of 3

Client : ENVIRONMENTAL TECHNOLOGIES GROUP Laboratory : Food/Pharmaceutical Division Melbourne

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Project : Micro testing on Clean Air Essential Oil sample Quote number :

Order number : 1293

Date Samples Received : 21-NOV-2011

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories Position Accreditation Category

Jennifer Matthews Microbiology Team Leader Microbiology





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General Comments

The analytical procedures used by the Food and Pharmaceutical Division have been developed from established internationally recognized procedures such as those published by the BP, USP, FCC and AOAC. In house developed procedures are employed in the absence of documented standards or by client request.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

- Analysis was performed on sample as received.
- . Growth was observed for media plus cultures only and media plus cultures and disinfectant
- No Growth was observed for media only and media plus disinfectant.
- Sample test dilution: Undiluted
- The sample identified as "Clean Air essential oil" did demonstrate acceptable disinfectant efficacy activity based on the evaluation set out in TGO 54 TGA Disinfectant Efficacy: Test Option C.
- Where cfu/mL = colony forming units per mL

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Analytical Results

| Reporting Category: PHARMACEUTICAL | Client sample ID: | Clean Air Essential Oil | | |
|--|-------------------|-------------------------|--|--|
| Client sampling date / time : | | [21-NOV-2011] | | |
| Compound | Unit | FM1107876-001 | | |
| TGO54 - Disinfectant Efficacy - Test 1 | | | | |
| Escherichia coli NCTC 8196 - Test 1 (8 minutes) | | 5/5 No growth | | |
| Staphylococcus aureus NCTC 4163 - Test 1 (8 minutes) | | 5/5 No growth | | |
| Inoculum Escherichia coli NCTC 8196 - Test 1 | CFU/mL | 1.3x10^9 | | |
| Inoculum Staphylococcus aureus NCTC 4163 - Test 1 | CFU/mL | 1.8x10^9 | | |
| TGO54 - Disinfectant Efficacy - Test 2 | | | | |
| Escherichia coli NCTC 8196 - Test 2 (8 minutes) | | 5/5 No growth | | |
| Staphylococcus aureus NCTC 4163 - Test 2 (8 minutes) | | 5/5 No growth | | |
| Inoculum Escherichia coli NCTC 8196 - Test 2 | CFU/mL | 1.4x10^9 | | |
| Inoculum Staphylococcus aureus NCTC 4163 - Test 2 | CFU/mL | 1.5x10^9 | | |
| TGO54 - Disinfectant Efficacy - Test 3 | | | | |
| Escherichia coli NCTC 8196 - Test 3 (8 minutes) | | 5/5 No growth | | |
| Staphylococcus aureus NCTC 4163 - Test 3 (8 minutes) | | 5/5 No growth | | |
| Inoculum Escherichia coli NCTC 8196 - Test 3 | CFU/mL | 1.2x10^9 | | |
| Inoculum Staphylococcus aureus NCTC 4163 - Test 3 | CFU/mL | 1.4x10^9 | | |