



CERTIFICATE OF ANALYSIS
Disinfectant Efficacy Test
Against H1N1 Influenza A Virus

| | | |
|-----------------------------------------------------------------------------|-------------------------------|-------------------------|
| Supplier: | Product: | Total Science TS-010 |
| Total Science WORLD 3 Rue Paul Eluard 38490 St Andre le Gaz FRANCE | Batch Number: | 200904 |
| | Expiry Date: | 10/04/2011 |
| | Date Received: | 15 September 2009 |
| | VLA Sample Reference: | MS394/09 |
| | Test Method Reference: | QCU0483* |
| | Date On Test: | 16 September 2009 |
| | Date Off Test: | 24 September 2009 |
| | Certificate Number: | H1N1/09/27 |

*The method used (QCU0483) is based on British Standard BS EN 14675:2006. See Appendix 1 (Influenza A H1N1 Disinfectant Efficacy Tests: Technical Specification).

TEST REPORT
Toxicity Test Results

| Test Dilution | Result |
|------------------|--------------------|
| Neat (Undiluted) | NON - TOXIC |
| Negative Control | NON - TOXIC |

Disinfectant - Virus Test Results

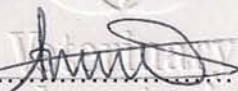
Specification: To pass the test the diluted disinfectant must reduce the titre of the virus by ≥ 4.0 .

| Dilution | Virus Titre | Reduction | Conclusion |
|------------------|-------------|-----------|-------------|
| Neat (Undiluted) | 0.33 | 4.86 | PASS |
| Positive Control | 5.19 | N/A | PASS |

CONCLUSION

Disinfectant Total Science TS-010 was non-toxic to the test system and demonstrated efficacy against H1N1 Influenza A Virus at the dilution tested.

NB. This test **does not** constitute Defra approval for the use of the disinfectant against H1N1 Influenza A Virus.

Signed:  Name: A. Morris Date: 30 September 2009

Scientific Services Unit



Appendix 1

Influenza A H1N1 Disinfectant Efficacy Tests: Technical Specification

This is a test to evaluate the efficacy of disinfectants in solution against a H1N1 Influenza A virus. The strain used in this test was originally isolated from pigs and may be described as a low pathogenic "avian-like" swine H1N1.

The method is based on British Standard BS EN 14675:2006: "Chemical Disinfectants and antiseptics – Quantitative suspension test for the evaluation of virucidal activity chemical disinfectants and antiseptics used in the veterinary field – Test methods and requirements (phase 2, step 1)".

This service is offered to help customers seeking efficacy data against H1N1. It does not represent Approval under the Defra Approval scheme, which should be sought in the normal way.

Method

The product is tested at one or three dilutions requested by the customer against high levels of the H1N1 virus. After a reaction period of 30 minutes at 10°C, the level of virus remaining is determined. The dilution of disinfectant that reduces the level of virus by $4\log_{10}$ (10,000) fold is considered to be effective. Yeast and Bovine Albumin are included in the test as "soiling agents" to mimic organic material likely to be found when the products are used.

Interpretation

The test is offered to provide evidence of efficacy. However, it must be remembered that the efficacy of products in the field depends on many factors. The results of the test offered by VLA should therefore be taken with other data when judging the appropriateness of use of individual products.

Reporting

The test takes two weeks to complete and report. The results are issued in the form of a signed Certificate of Analysis.

Quality

VLA is certified ISO 9001.

