

STUDY REPORT

GENERAL STUDY INFORMATION

Study Title: Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

Project Number: A09902

Protocol Number: VBS01070110.FLUA

Sponsor: Vance Chemicals Pte. Ltd.
No. 24 Gul Lane
Singapore 629418

Testing Facility: ATS Labs
1285 Corporate Center Drive, Suite 110
Eagan, MN 55121

TEST SUBSTANCE IDENTITY

Test Substance Name: The Germ Killer

Lot/Batch(s): Lot BN100296 and Lot BNL100001

Test Substance Characterization

Test substance characterization as to content, stability, solubility, storage, etc., (40 CFR, Part 160, Subpart F [160.105]) is the responsibility of the Sponsor.

STUDY DATES

Date Sample Received: July 14, 2010 (Lot BN100296) July 15, 2010 (Lot BNL100001)

Study Initiation Date: July 27, 2010

Experimental Start Date: August 4, 2010

Experimental End Date: August 11, 2010

Study Completion Date: August 25, 2010

OBJECTIVE

The objective of this study was to evaluate the virucidal efficacy of a test substance against 2009-H1N1 Influenza A virus (Novel H1N1) according to test criteria and methods approved by the United States Environmental Protection Agency (U.S. EPA) for registration of a product as a virucide.

SUMMARY OF RESULTS

Test Substance:	The Germ Killer, Lot BN100296 and Lot BNL100001
Dilution:	Ready to use (RTU), pump spray
Virus:	2009-H1N1 Influenza A virus (Novel H1N1) Strain A/Mexico/4108/2009 CDC #2009712192
Exposure Time:	Five minutes
Exposure Temperature:	25-28°C (26.0°C)
Organic Soil Load:	1% fetal bovine serum
Efficacy Result:	Two lots of The Germ Killer met the test criteria specified in the study protocol. The results indicate complete inactivation of 2009-H1N1 Influenza A virus (Novel H1N1) under these test conditions as required by the U.S. EPA for claims of virucidal activity.

STUDY RESULTS

Results of tests with two lots of The Germ Killer (Lot BN100296 and Lot BNL100001), ready to use as a pump spray, exposed to 2009-H1N1 Influenza A virus (Novel H1N1) in the presence of a 1% fetal bovine serum organic soil load at 26.0°C for five minutes are shown in Tables 1-3. All cell controls were negative for test virus infectivity. The titer of the input virus control was 5.5 log₁₀. The titer of the dried virus control was 5.5 log₁₀. Following exposure, test virus infectivity was not detected in the virus-test substance mixture for either lot at any dilution tested (≤ 1.5 log₁₀). Test substance cytotoxicity was observed in both lots at 1.5 log₁₀. The neutralization control (non-virucidal level of the test substance) indicates that the test substance was neutralized at ≤ 1.5 log₁₀ for both lots. Taking the cytotoxicity and neutralization control results into consideration, the reduction in viral titer was ≥ 4.0 log₁₀ for both lots.

STUDY CONCLUSION

Under the conditions of this investigation and in the presence of a 1% fetal bovine serum organic soil load, The Germ Killer (Lot BN100296 and Lot BNL100001), ready to use as a pump spray, demonstrated complete inactivation of 2009-H1N1 Influenza A virus (Novel H1N1) following a five minute exposure time at 26.0°C as required by the U.S. EPA for virucidal label claims.

In the opinion of the Study Director, there were no circumstances that may have adversely affected the quality or integrity of the data.