



Case Ref. No.: M88/04/04
Payment no.: CVL5224

Attn: Ms Yap Mee Fah
Okada Ecotech Pte Ltd
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#07-15/17
Alexandra Distripark
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LABORATORY REPORT

Type of examination : Virological
Specimen Description : Liquid disinfectant "Bioact-T DS"
Received from : Okada Ecotech Pte Ltd
Date received : 19/04/04
Date tested : 19/04/04 – 26/04/04

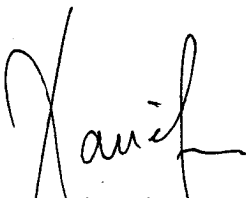
Report:

Please refer to the attached sheet for results of the virucidal activity of the disinfectant against Aujeszky's Disease virus.

The disinfectant was tested according to the method in Annex A.

Tests for virucidal activity against Infectious Bronchitis virus, Newcastle Disease virus and Classical Swine fever virus are in progress.

27/04/04


Dr Lim Chee Wee
Laboratory Veterinarian

Notes : All results in this report are applicable only to the respective specimen(s) tested. This test report shall not be reproduced except in full, without written approval from our laboratory.

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Test Results:

Table 1: Effects of Bioact-T DS disinfectant on **Aujeszky's Disease Virus** following a **45** and **60** minutes exposure at a dilution of **1:80**

Dilution of Disinfectant	1:80*		Virus Control (TCID ₅₀ /50µl)
Exposure Time	Virus Titre (TCID ₅₀ /50µl)	% Reduction	
45 min	≤10 ^{1.5}	≥99.999	10 ^{6.6}
60 min	≤10 ^{1.5}	≥99.999	

* - Toxic effect at 10⁻¹ viral dilution

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Annex A

- I. **Test substance:** Bioact-T DS BN 2004041301
- II. **Dilution:** 1:80
- III. **Virus:** Aujeszky's Disease virus (ADV)
- IV. **Exposure Time:** 45 and 60 minutes
- V. **Exposure Temperature:** Room temperature (28⁰C, +/- 1⁰C)
- VI. **Culture:** PK15 cell-line
- VII. **Neutralising solution (NS):** Sodium Thiosulfate (0.1%)
- VIII. **Method:**
1. The disinfectant was diluted to 1:40 with deionised, distilled water and sterilized by filtration through a 0.2µm filter membrane on the day of test.
 2. 1 ml of each of the diluted test substance was added to an equal volume of virus. Final dilution of test substance: 1:80.
 3. At the end of each exposure time, 0.5ml of the virus-disinfectant mixture was added to 2ml of the neutralising solution.
 4. The mixtures were then serially diluted up to 10⁻⁸.
 5. Include virus (virus + virus diluent), cytotoxicity assay (diluted disinfectant + NS), neutralisation effectiveness (diluted disinfectant + NS + low titre virus) and negative (virus diluent only) controls.
 6. 50µl of each of the virus dilution was added to their respective wells on a 96-well tissue culture microplate. An equal volume of cell suspension was added to all wells.
 7. The plates were incubated at 37⁰C, 5% CO₂ for 48 hours.
 8. At the end of the incubation period, the cells were observed under microscope for the presence of cytopathic effect.
 9. The virus titre was calculated using the Karber's method.

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