



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

Attn: Ms Yap Mee Fah
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#07-15/17
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LABORATORY REPORT (Addendum)

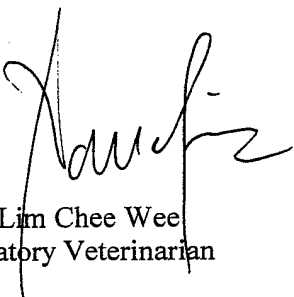
Type of examination : Virological
Specimen Description : Liquid disinfectant "Bioact-T DS"
(Lot no.: BN 2004041301)
Received from : Okada Ecotech Pte Ltd
Date received : 19/04/04
Date tested : 20/05/04 – 24/05/04

Report:

Please refer to Annex D, for the results of the virucidal activity of the disinfectant against the Newcastle Disease virus.

The disinfectant was tested according to the method in Annex E, at exposures of 45 and 60 minutes and at a dilution of 1/80 of the disinfectant. There is $\geq 99.99\%$ reduction in virus titre in the above test.

24/05/04


Dr Lim Chee Wee
Laboratory Veterinarian

M88/04/04

Test Results:

Table 1: Effects of Bioact-T DS (BN 2004041301) disinfectant on **Newcastle Disease Virus** following a **45** and **60** minutes exposure at a dilution of **1:80**

Dilution of Disinfectant	1:80		Virus Control (EID ₅₀ /0.2ml)
Exposure Time	Virus Titre (EID ₅₀ /0.2ml)	% Reduction	
45 min	≤10 ^{0.5}	≥99.999	10 ^{6.5}
60 min	≤10 ^{0.5}	≥99.999	

Annex E

- A. **Test substance:** Bioact-T DS BN 2004041301
- B. **Dilution:** 1:80
- C. **Virus:** Newcastle Disease Virus (NDV)
- D. **Exposure Time:** 45 and 60 minutes
- E. **Exposure Temperature:** Room temperature (28⁰C, +/- 1⁰C)
- F. **Host:** 10-day-old Specific-Pathogen-Free chicken embryonated eggs (5 eggs per dilution per exposure time)
- G. **Neutralising solution (NS):** Letheen broth + Sodium Thiosulfate (0.1%) + Tween 20 (3%)
- H. **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 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 + NS), cytotoxicity (diluted disinfectant + NS), neutralisation (diluted disinfectant + NS + low titre virus) and negative (virus diluent only) controls.
 6. 0.2ml of each of the suspension was inoculated into the eggs.
 7. The eggs were incubated at 37⁰C for 4 days and candled daily to check for embryo death.
 8. Upon embryo death or at the end of the incubation period, the embryos were examined for symptoms of IBV infection.
 9. The virus-titre was calculated using the Karber's method.