

Agri-Food & Veterinary Authority of Singapore

Central Veterinary Laboratory

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Case Ref. No.: M88/04/04文件編號: M88/04/04Payment No.: CVL5224餐票編號: CVL5224

Okada Ecotech Pte Ltd

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Singapore 118478

LABORATORY REPORT (Addendum)

檢驗報告 (續)

Type of Examination: Virological 檢驗項目: 病毒實驗

Specimen Description: Liquid disinfectant "Bioact-T DS" 檢驗試劑: 液體消毒劑 "Bioact-T DS"

(Lot no.: BN 2004041301) (批號: BN2004041301)

Received from: Okada Ecotech Pte Ltd 送檢單位:新加坡岡田生態技術私人有限公司

Report:

檢驗結果:

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

有關此消毒劑對抗新城病病毒之試驗結果,請參閱附件 D。

The disinfectant was tested according to the method in <u>Annex E</u>, 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.

本消毒劑的測試依據**附件 E** 中所示方法進行,經 80 倍稀釋後分別測試 45 分鐘及 60 分鐘後的作用效果。在本試驗的病毒滴量條件下,本消毒劑的殺病毒率≥99.99%。

Dr Lim Chee Wee Laboratory Veterinarian

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Annex D

附件D

M88/04/04

Test Results:

檢驗結果:

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**

表一: Bioact-T DS(批號: BN2004041301) 消毒液經 80 倍稀釋後作用於新城病病毒 45 分鐘及 60 分鐘 後的效果顯示

Dilution of Disinfectant 消毒液稀釋比例	1: 80*		Virus Control
Exposure Time 作用時間	Virus Titre	% Reduction	Virus Control (EID ₅₀ / 0.2 ml) 病毒控制程度
	(EID ₅₀ / 0.2 ml) 病毒滴量	致死率%	
45 min (45 分鐘)	$\leq 10^{0.5}$	≥ 99.999	10 ^{6.5}
60 min (60 分鐘)	$\leq 10^{0.5}$	≥ 99.999	10

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Annex E

附件E

A. Test substance: Bioact-T DS BN 2004041301

A.檢驗物質: Bioact-T DS BN 2004041301

B. Dilution: 1:80

B.稀釋比例: 1:80

C. Virus: Newcastle Disease virus (NDV)

C.作用病毒: 新城病病毒(NDV)

D.作用時間: 45 分鐘及 60 分鐘

D. Exposure Time: 45 and 60 minutes

E.測試溫度: 室溫 28°C, +/-1°C

E. Exposure Temperature: Room temperature (28°C, +/- 1°C) Host: 10-day-old

Specific-Pathogen-Free chicken F. 病毒載體: 10 日齡無特殊病原菌的雞胚

embryonated eggs (5 eggs per dilution per exposure time)

(每份稀釋液每次作用時間需5只雞胚)

G. Neutralising solution (NS): Letheen broth + Sodium

G. 中和溶液: 瓊脂肉湯 + 0.1%硫代硫酸鈉

Thiosulfate (0.1%) + Tween 20 (3%)

溶液+ 3% Tween 20

H. Method:

H.試驗方法:

1. The disinfectant was diluted to 1:40 with deionised, distilled water and sterilized by filtration through a 0.2 µm filter membrane on the day of test.

先將 Bioact-T DS 消毒液以 1:40 的比例稀釋於去離子水中, 並在試驗當日通過孔徑為 0.2 μm 過濾 膜蒸餾滅菌。

2. 1 ml of the diluted test substance was added to an equal volume of virus. Final dilution of test substance: 1:80.

再在每 1ml 稀釋後的 Bioact-T DS 消毒液中加入等量的作用病毒, 使最終試驗液的稀釋比 例為1:80。

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3. At the end of each exposure time, 0.5 ml of the virus-disinfectant mixture was added to 2ml of the neutralizing solution.

在每次規定的作用時間結束後,將 0.5ml 的混合溶液中加入 2ml 的中和溶液。

4. The mixtures were then serially diluted up to 10^{-8} . 將混合溶液連續稀釋至 10^{-8} 。

5. Include virus (virus + NS), cytotoxicity (diluted disinfectant + NS), neutralization (diluted disinfectant + NS + low titre virus) and negative (virus diluents only) controls.

包括作用病毒(作用病毒 + 中和溶液)、檢驗細胞毒性(消毒液稀釋液 + 中和溶液)、中和效用溶液(消毒液稀釋液 + 中和溶液 + 低滴度作用病毒)和負離子(僅作用病毒稀釋液)控制。

6. 0.2ml of each of the suspension was inoculated into the eggs.

上述每種懸浮液取 0.2ml, 分別註入雞胚中。

7. The eggs were incubated at 37°C for 4 days and candled daily to check for embryo death.

將上述雜胚放置在溫度 37℃條件下培養 4 天, 每天透過燭光檢查胚胎死亡情況。

8. Upon embryo death or at the end of the incubation period, the embryos were examined for symptoms of IBV infection.

在胚胎死亡或培養期結束後、觀察雞胚受雞傳染性支氣管炎病毒感染的情況。

9. The virus titre was calculated using the Karber's method.

使用 Karber 法計算病毒的滴度。

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