## Analytical MicroLabs

## **Industrial** Microbiologists

14 Separation Street, North Geelong VIC 3215 Phone: (03) 5272 2985 Fax: (03) 5272 1322 ABN: 55 167 987 554

NATA Accreditation number: 14917

Monday, January 09, 2004

From: Zoltan Nack Tel: 03-52722985

Analytical MicroLabs

To: Ravi Narain Tel: 03-52723122

GDM Technologies, Pty. Ltd.

**Subject:** Evaluation of data provided for the antiviral effect of Citrofresh 14P

Dear Ravi,

Following our discussion, please find my assessment, regarding your product – CITROFRESH 14P antiviral efficacy, especially to use as a disinfectant against Avian Influenzae and Newcastle Disease Viruses.

Citrofresh 14P – has been tested against Avian Influenzae Virus and Newcastle Disease Virus by a MAFF Laboratory in the UK - Maryhill Limited- and found **to be highly effective.** 

Tests conducted by the Central Veterinary Laboratory in Weybridge (UK) also provided **positive** inactivation data on Avian Influenzae and Newcastle Disease Virus.

A letter received from the Australian Animal Health Laboratory (CSIRO) also concluded after considering data received on the product viral inactivation effect, that a two step decontamination process **can successfully eliminate** both Avian Influenzae and Newcastle Disease Virus from different surfaces by using Citrofresh.

It was also concluded in a letter from Abbott Analytical, Cleveland, US, that your product **would be effective** against FMD and other exotic viruses.

I am aware that your product contains natural organic acids, like Citric acid and Ascorbic acid and Malic acid which have been proven to be an effective agent against single stranded RNA viruses, like FMD and double stranded DNA viruses like Herpes.

My own scientific testing on your product shows a very strong antibacterial and antifungal attribute and it will be my intention in the near future to recommend your product to the Therapeutic Goods Administration (TGA) as a specific, Hospital Grade Disinfectant against Methicillin Resistant Staphylococcus aureus and Vancomycin Resistant Enterococcus faecalis.

**In my conclusion**, it is my scientific opinion, considering the above mentioned results, that Citrofresh 14P is a very effective antiviral agent and in adequate concentration - recommended from 6% to 8% - can be used effectively to eliminate the above mentioned viruses completely.

The process to apply Citrofresh can vary depending on the requirements and being non-toxic product, and regarded as a "GRAS" product by the FDA under 21 CFR 182.20, it does not require rinsing after application.

It is also safe to use without protective clothing, biodegradable, non-corrosive and breaks through biofilms, which is a big advantage in comparison with other chlorine, ammonium and peroxide based disinfectants.

Yours sincerely

Zoltan Nack, MSc. MBA. MASM

Biologist, Senior Scientist Analytical Microlabs.

Elle Mal