

Certificate of Analysis

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Analytical Report: AAH07749

Eurofins Sample Number: NJ20AA2144-2

Version: 1

Aussan Laboratories Pty Ltd 15 Fordson Rd Campbellfield VIC, 3061 AU Client Account Number: A0082313732B Eurofins Quote Number: XC8UPH20005001

Eurofins Sample Number NJ20AA2144-2

Original Received Date: 20-Feb-2020

Description: Aussan L44 100mL

Containers Submitted: 1 Bottle(s)

Analysis	Result
005 Testing of virucidal activity of disinfectants by suspension technique	See Attached Report for Result
Refer to Attachment # 1	

Method: EN 14476

Analysis Date: 20-Mar-2020

Supplemental Information

Murine hepatitis virus ATCC ® VR-261™ is a member of the Coronavirus family and has been used as a surrogate for the SARS coronavirus in published disinfectant studies*.

*The antiviral action of common household disinfectants and antiseptics against murine hepatitis virus, a potential surrogate for SARS coronavirus.

https://www.ncbi.nlm.nih.gov/pubmed/19692148

*Murine hepatitis virus strain 1 produces a clinically relevant model of severe acute respiratory syndrome in A/J mice.

https://www.ncbi.nlm.nih.gov/pubmed/17041219

The American Type Culture Collection (ATCC) also lists VR-261 under its SARS Research Material.

Samples were tested as received. Specifications (if) reported are as provided by the client.

Contracted Company: Eurofins ams Laboratories Sydney

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TGA Licence No: MI-15112007-LI-002191-11 APVMA Licence No: 6139

Questions about this report should be directed to your project manager or the general email listed above.



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CONDITIONS			
Virus Strain	Murine hepatitis virus (MHV) -1 ATCC/VR-261		
Cell Substrate	A9 cells ATCC/CCL- 1.4		
Test Concentration	6% (in hard water)		
Contact Time	10 minutes		
Test Temperature	Room temperature		
Test Condition	Dirty 3% FBS (Fetal Bovine Serum) with 3% erythrocytes (EN14476)		
Neutraliser	2% FBS in MM		

RESULTS: TABLE 1: MHV-1 virus test/control results for 10 mins contact

Virus Dilution	Number of Inoculated Wells	Virus Control	Cytotoxicity	Neutralisation	Test Sample
10-1	4	4+/4	С	С	С
10-2	4	4+/4	0+/4	4+/4	2+/4
10 ⁻³	4	4+/4	0+/4	4+/4	1+/4
10-4	4	4+/4	N/A	N/A	0+/4
10 ⁻⁵	4	3+/4	N/A	N/A	0+/4
10-6	4	3+/4	N/A	N/A	0+/4
10 ⁻⁷	4	1+/4	N/A	N/A	N/A
10-8	4	0+/4	N/A	N/A	N/A
Log ₁₀	-	6.33	1.50	1.50	2.23
Log ₁₀ Reduction of Virus after Treatment			4.10		

Note: Presence of virus in each response is recorded as "+"

Absence of virus in each response is recorded as "0"

Cytotoxic response is recorded as "C"

Calculated virus titre = $10^{6.33}$ TCID_{50/0.1ml} (6.33 log₁₀) Cell control - 4 wells with healthy cell monolayer

CONCLUSIONS:

Considering the cytotoxicity and neutralisation test results, the sample "Aussan L44" has shown virucidal efficacy against MHV-1 by achieving 4.10 log reduction in virus concentration after 10 minutes exposure period at room temperature.

^{*} The Reed & Muench LD50 Method was used for determining the virus titre endpoint.