

CONDITIONS	
Virus Strain	Murine hepatitis virus (MHV) -1 ATCC/VR-261
Cell Substrate	A9 cells ATCC/CCL- 1.4
Test Concentration	5 g in 500 mL (Hard water)
Contact Time	5 hours
Test Temperature	Room temperature
Test Condition	Dirty 5% FBS (Fetal Bovine Serum)
Neutraliser	2% FBS in MM

RESULTS: TABLE 1: MHV-1 test/control results for 5 hours contact

Virus Dilution	Number of Inoculated Wells	Virus Control	Cytotoxicity	Neutralisation	Test Sample
10 ⁻¹	4	4 ⁺ /4	C	C	C
10 ⁻²	4	4 ⁺ /4	0 ⁺ /4	4 ⁺ /4	3 ⁺ /4
10 ⁻³	4	4 ⁺ /4	0 ⁺ /4	4 ⁺ /4	3 ⁺ /4
10 ⁻⁴	4	4 ⁺ /4	N/A	N/A	2 ⁺ /4
10 ⁻⁵	4	4 ⁺ /4	N/A	N/A	0 ⁺ /4
10 ⁻⁶	4	4 ⁺ /4	N/A	N/A	0 ⁺ /4
10 ⁻⁷	4	2 ⁺ /4	N/A	N/A	N/A
10 ⁻⁸	4	2 ⁺ /4	N/A	N/A	N/A
Log ₁₀	-	7.5	1.5	1.5	3.56
Log ₁₀ Reduction of Virus after Treatment				3.94	

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 = $10^{7.50} \text{TCID}_{50/0.1\text{ml}}$ (7.50 log₁₀)

Cell control - 4 wells with healthy cell monolayer

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

CONCLUSIONS:

Considering the cytotoxicity and neutralisation test results, the sample has shown virucidal efficacy against MHV-1 by achieving 3.94 log reduction in virus concentration after 5 hours exposure period at room temperature.