FINAL REPORT

VIRUCIDAL SUSPENSION EFFICACY TEST Enterovirus

TEST AGENT Nanocomposite Material

Author Zheng Chen, M.S.

Performing Laboratory
MicroBioTest
Division of Microbac Laboratories, Inc.
105 Carpenter Drive
Sterling, Virginia 20164

<u>Laboratory Project Identification Number</u> 852-102

Sponsor

JM Material Technology Inc
O. 5F.-3, No. 40-2, Sec. 1, Minsheng N. Rd.
Guishan Township, Taoyuan County 333
Taiwan (R.O.C.)

Page 1 of 9

Project No. 852-102

Page 9 of 9

RESULTS (continued)

Table 2
Neutralizer Effectiveness/Viral Interference and Cytotoxicity Controls

Dilution of the Neutralized Sample	Neutralizer Effectiveness/Viral Interference Control (with UV-A) ^a	Cytotoxicity with Control (with UV-A) and cytotoxicity observed	
10^-1	virus detected in 4 out of 4 wells		
10^-2	virus detected in 4 out of 4 wells	no cytotoxicity observed	
10^-3	virus detected in 4 out of 4 wells	no cytotoxicity observed	

a Sample was processed by Sephacryl column.

Table 3 Reduction Factor

Test Agent	Contact Time	Initial Viral Load (Log ₁₀ TC(D ₁₀)	Output Viral Load (Log ₁₀ TCID ₆₀)	Log ₁₀ Reduction	Percent Reduction (%)
Nanocomposite Material	20 minutes	5.78	≤ 1.61	≥ 4.17	≥ 99.99

CONCLUSIONS

MicroBioTest personnel performed the inactivation procedure using Enterovirus to spike the test agent solution. Samples were taken and titrated by 50% tissue culture infectious dose (TCID₅₀) endpoint assay using LLC-MK2 cells.

Table 3 reports the individual Log₁₀ virus reduction factor for the test article treatment procedure. All of the controls met the criteria for a valid test. These conclusions were based on observed data.

MicroBioTest