Quality Test Report

ORIGINAL

Test Report No. TW-2060015A

Applicant: Ming Fong Technology Co.,Ltd.
No. 13, Zhongshan RD., Tucheng Dist.,
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December 11 , 2020

BOKEN QUALITY EVALUATION INSTITUTE

BOKEN

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Test results to the sample submitted are as follows.

Date of reception: June 30 , 2020
Item Name/Item number: :Polycarbonate coated with JM nanocomposite material
Quantity: 2

[Test Item] A method specified by the applicant (Determination of antiviral activity)
[Reference standard] ISO21702, JIS R 1702
[Test Method]
Virus solution prepared so that viable account in the MEM medium is about 10^8 PFU/mL or more was diluted 10 times with sterile purified water. Used it as test virus solution.
Inoculated 0.4 mL of the test virus solution on each 5 cm square specimen placed, covered them with 4 cm cover film and irradiated the light under black light for 4 h.
After 4 h light-irradiation, put them into stomacher bags, added 10 mL of the washing-out solution, kneaded sufficiently and washed the virus out.
Measured the virus infectivity titer in the wash-out solution and calculated the common logarithm value of the infectivity titer per cm^2 of test specimen. Used "Polycarbonate (Blank)" as a comparison control, and carried out the measurements after 4 h and immediately after inoculation.

Type of the light source: fluorescent blacklight lamp 20 W x 2 (TOSHIBA FL20S BLB)
Integrating UV light meter: Hamamatsu Photonics K.K., C10427, H10428
Irradiation condition: 0.25 mW/cm^2・4 h (25±5 ℃)
Type of the cover film: film sheet for overhead projector
Type of the glass for moisture retention: borosilicate glass
Wash-out solution: SCDLP medium
Measurement method of the virus infectivity titer: Plaque assay

[Test virus] Influenza A virus (H1N1): ATCC VR-1469

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[Test Result]
Concentration of the test virus: 2.5 × 10^7 PFU/mL

Name of the sample	Common logarithm value of infectivity titer	Antiviral activity value
Polycarbonate (Blank), immediately after inoculation [U_o]	5.72	———
Polycarbonate (Blank), after 4 h [U_t]	5.30	———
Polycarbonate coated with JM nanocomposite material (JM-TTA01) [A_t]	2.82	2.4

* Calculation of antiviral activity value in ISO21702:2019.
Antiviral activity value = $U_t - A_t$

* Tested by Boken Osaka laboratory.

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