

ORIGINAL

Quality Test Report

Test Report No. TW-2010200
(24419006286-1) 1 / 2

Applicant: AMBER NANOTECH CO., LTD.
NO. 156, Keda 1st Rd., Zhubei City,
Hsinchu County 30286, Taiwan

February 17, 2020

Test results to the sample submitted are as follows.

BOKEN QUALITY EVALUATION INSTITUTE

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**Osaka Functional Textile
Testing Center**

Date of reception: January 30, 2020

Item Name/Item number: Thermal Bond non-woven

Quantity: 2

1-6-24, Chikko, Minato-ku, Osaka-shi

OSAKA 552-0021, JAPAN

TEL.+81-6-6577-0200/FAX.+81-6-6577-0210

[Test Item] A method specified by the applicant (Determination of antiviral activity)

[Reference standard] ISO18184, 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 0.2 mL of the test virus solution on each 5 cm square specimen placed on the 6 cm square glass plates, covered them with 6 cm square glass plate for adhesion and irradiated the light under black light for 2 h.

After 2 h light-irradiation, put them into stomacher bags, added 20 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 specimen. Used "Thermal Bond non-woven (Blank)" as a comparison control, and carried out the measurements after 2 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: $0.25 \text{ mW/cm}^2 \cdot 2 \text{ h}$ ($25 \pm 5 \text{ }^\circ\text{C}$)

Type of the glass plate for adhesion: borosilicate glass

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

Notice - This test result is applied to the submitted sample, not to the lot.

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[Test Result]

Concentration of the test virus: 1.2×10^7 PFU/mL

Name of the sample	Common logarithm value of infectivity titer	Antiviral activity value
Thermal Bond non-woven (Blank), immediately after inoculation $\lg[V_a]$	6.51	————
Thermal Bond non-woven (Blank), after 2 h $\lg[V_b]$	5.64	————
Thermal Bond non-woven coated with JM nanocomposite material (JM-TTA01) $\lg[V_c]$	3.90	2.6

* Judgment of test effectiveness of control specimens in ISO18184:2019.

$$M = \lg[V_a] - \lg[V_b] \leq 1.0$$

* Calculation of antiviral activity value in ISO18184:2019.

$$\text{Antiviral activity value} = \lg[V_a] - \lg[V_c]$$

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Supervised by *Yoshihiro Inuomaki*

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