

## Test Report

Applicant: Diamond Electronics Ltd.  
Fourways Technology Park,  
London Road, Smallwood, Nr. Sandbach,  
Cheshire, CW11 2US, United Kingdom

Number : TWNC00836880

Date : Nov 13, 2019

Sample Description:

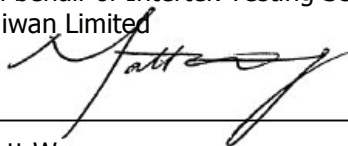
One (1) Piece of Submitted Sample Said To Be :

Item Name : Silicone Rubber Keyboard  
Brand : ioniTOUCH  
Date Sample Received : Oct 31, 2019  
Date Test Started : Oct 31, 2019

Test Conducted:

As requested by the applicant, for details please refer to attached pages.

Authorized By:  
On behalf of Intertek Testing Services  
Taiwan Limited



Matt Wang  
Sr. Manager



Signed by:



Thomas Chou  
Manager



Test Conducted :

**Test For Antimicrobial Activity And Efficacy On Antimicrobial Products**

With reference to JIS Z 2801 : 2010 and Amendment 1:2012.

Tested Specimen : White soft plastic sheet (marked v side)

Result :

Name Of Test Bacteria (Strain Number)	<i>Methicillin resistant Staphylococcus aureus subsp. aureus ( MRSA ) (ATCC 33591)</i>	<i>Klebsiella pneumoniae (ATCC 4352)</i>
Concentration of inoculum	3.95 X 10 <sup>5</sup> CFU/mL	3.50 X 10 <sup>5</sup> CFU/mL
Average of the number of viable cells of bacteria immediately after inoculation on the control sample (U <sub>0</sub> )	8.78 X 10 <sup>3</sup> CFU/cm <sup>2</sup> /Log : 3.94	8.08 X 10 <sup>3</sup> CFU/cm <sup>2</sup> /Log : 3.91
Average of the number of viable cells of bacteria on the control sample after 24 hours (U <sub>t</sub> )	1.88 X 10 <sup>3</sup> CFU/cm <sup>2</sup> /Log : 3.27	3.28 X 10 <sup>5</sup> CFU/cm <sup>2</sup> /Log : 5.52
Average of the number of viable cells of bacteria on the antimicrobial test piece after 24 hours (A <sub>t</sub> )	<0.063 CFU/cm <sup>2</sup> # /Log : --	<0.63 CFU/cm <sup>2</sup> # /Log : --
Value of antimicrobial activity (R)	> 2.64	> 4.89

Calculation :  $R = (U_t - U_0) - (A_t - U_0) = U_t - A_t$

Remarks : CFU = Colony forming unit

< = Less than

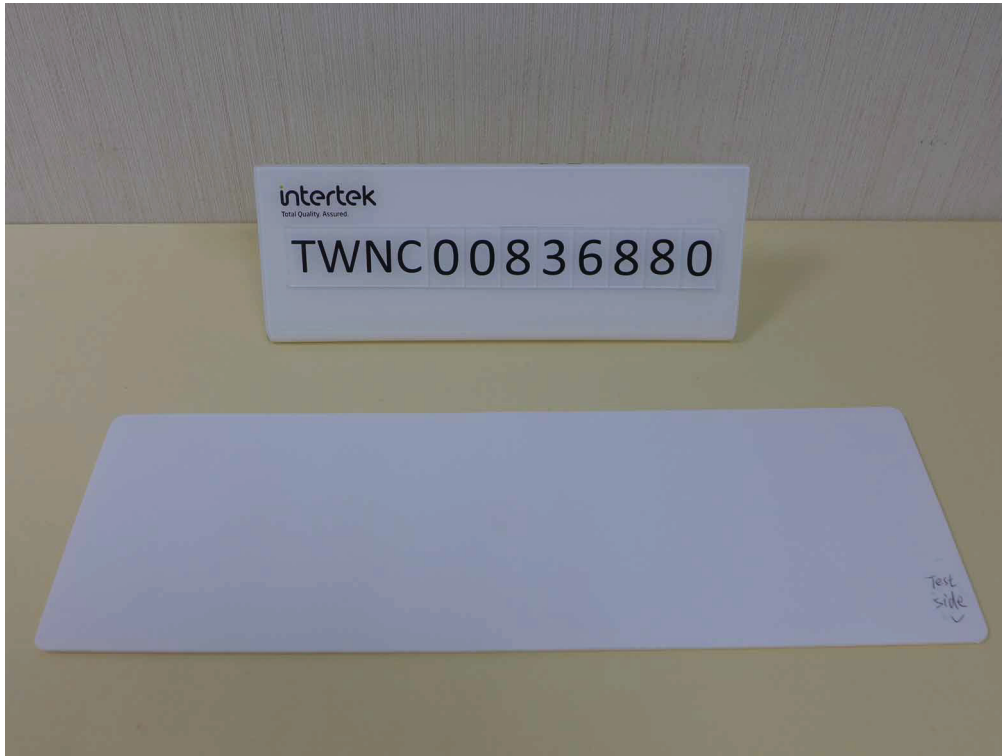
> = More than

The antimicrobial efficacy value shall be not less than 2.0 for antimicrobial products.

# = When the number of viable bacteria "A<sub>t</sub>" is less than or equal to 1.0, it shall be taken as "A<sub>t</sub>" and the average of logarithm numbers shall be calculated



Sample photo:



End of Report

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**Reporting Statements of Conformity:** Please note that the test results contain statement of conformity with the decision rules which are based on the specifications of customers, regulations and standards, and does not consider measurement uncertainty.



## Test Report

Applicant: Diamond Electronics Ltd  
Fourways Technology Park, London Road, Smallwood,  
Nr. Sandbach, Cheshire, CW11 2US,  
United Kingdom

Number : TWNC00848398

Issue Date : Dec 16, 2019

Sample Description:

One (1) Piece of Submitted Sample Said To Be :  
Item Name : Silicone Rubber Keyboard  
Brand : ioniTOUCH  
Date Job Applied : Dec 13, 2019

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Test Conducted:

As requested by the applicant, for details please refer to attached pages.

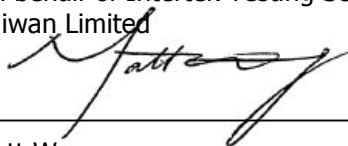
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Remarks:

Results were transferred from report No. TWNC00785432 dated May 09, 2019.

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Authorized By:  
On behalf of Intertek Testing Services  
Taiwan Limited



Matt Wang  
Sr. Manager



Signed by:



Thomas Chou  
Manager



Test Conducted :

**Test For Antimicrobial Activity And Efficacy On Antimicrobial Products**

As per JIS Z 2801 : 2010 and Amendment 1:2012.

Tested Specimen : Submitted sample

Result :

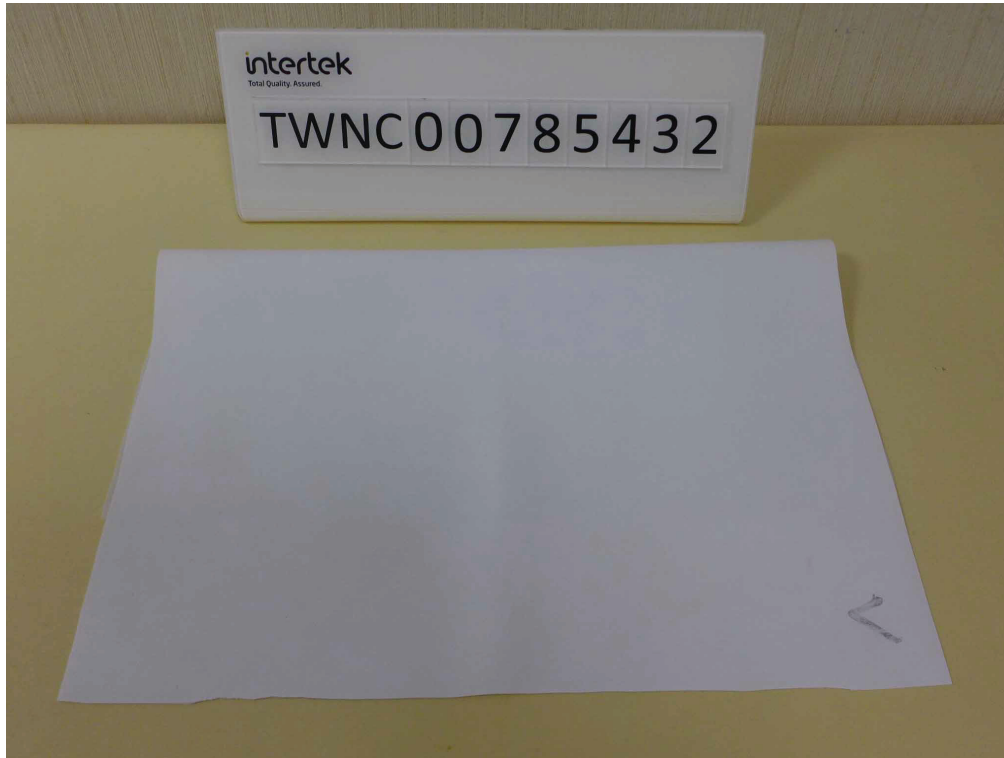
Name Of Test Bacteria (Strain Number)	<i>Escherichia coli</i> (ATCC 8739)
Concentration of inoculum	3.55 X 10 <sup>5</sup> CFU/mL
Average of the number of viable cells of bacteria immediately after inoculation on the control sample (U <sub>0</sub> )	8.50 X 10 <sup>3</sup> CFU/cm <sup>2</sup> / Log : 3.93
Average of the number of viable cells of bacteria on the control sample after 24 hours (U <sub>t</sub> )	2.88 X 10 <sup>6</sup> CFU/cm <sup>2</sup> / Log : 6.46
Average of the number of viable cells of bacteria on the antimicrobial test piece after 24 hours (A <sub>t</sub> )	5.02 X 10 <sup>2</sup> CFU/cm <sup>2</sup> / Log : 2.70
Value of antimicrobial activity (R)	3.76

Calculation :  $R = (U_t - U_0) - (A_t - U_0) = U_t - A_t$

Remarks : CFU = Colony forming unit  
The antimicrobial efficacy value shall be not less than 2.0 for antimicrobial products.



Sample photo:



End of Report

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