



Test Report

GZF20-008745-02

Date: 03 Jun 2020

Client Name: MAX Interactive Inc
Client Address: 17752 Mitchell N, Suite D,Irvine, CA 92614, USA

Sample Name: TPU material with antimicrobial additives
Sample Batch No.: /
Production Date: 20200515
Manufacturer: /
Sample other information: Same TPU material is used for Shield Extreme-M , Shield Extreme -S XX , Shield Case, Edge Protect Plus, Extreme Shell -S, Whiteboard Case

Above information and sample(s) was/were submitted and certified by the client, SGS quoted the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS Reference No. : /
Date of Sample Received : 19 May 2020
Testing Period : 19 May 2020 - 03 Jun 2020
Test Requested : Selected test(s) as requested by client.
Test Method : Please refer to next page(s).
Test Result(s) : Please refer to next page(s).

Unless otherwise stated the results shown in this test report refer only to the items tested, and for clients internal use only, not to the society has the proof function. This document cannot be used for publicity, without prior written approval of the SGS.



SGS Authorized Signature

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Test Report

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Sample Description :

Specimen No.	SGS Sample ID	Description
1	GZF20-008745.002	Sheet sample

Test Result(s) :

Test Requested : Test of antimicrobial activity

Test Method : ISO 22196:2011 Measurement of antibacterial activity on plastics and other non-porous surfaces

GZF20-008745.002

Test organism	Escherichia coli ATCC 8739	Staphylococcus aureus ATCC 6538P
Concentration of bacteria (CFU/mL)	5.0x10 ⁵	5.5x10 ⁵
Volume of test inoculum(mL)	0.2	0.2
U ₀	3.82	3.86
U _t	5.26	5.45
A _t	-0.20	-0.20
R	5.5	5.7
*The antibacterial activity rate(%)	>99.99	>99.99

Notes :

- 1.The control sample is plastic film without antimicrobial activity, provided by SGS laboratory.
- 2.U₀: the average of the common logarithm of the number of viable bacteria(CFU/cm²) recovered from the untreated test specimens immediately after inoculation.
- 3.U_t: the average of the common logarithm of the number of viable bacteria(CFU/cm²) recovered from the untreated test specimens after 24h.
- 4.A_t: the average of the common logarithm of the number of viable bacteria(CFU/cm²) recovered from the treated test specimens after 24h.
- 5.R: the value of antimicrobial activity, R=U_t-A_t.
- 6.* The calculation formula of the antibacterial activity rate is provided by the client, the calculation formula is **【(B-C)/B】 *100%**;
B: arithmetic average of the numbers of bacteria obtained from control samples after 24h incubation(CFU/cm²);

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C: arithmetic average of the numbers of bacteria obtained from samples after 24h incubation(CFU/cm²).

Sample photo:



SGS authenticate the photo on original report only

*** End ***



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