

TEST REPORT

Applicant: MID OCEAN BRANDS B.V.
7/F KINGS TOWER
111 KING LAM STREET
CHEUNG SHA WAN
KLN

Number: HKGH03078338

Date: Dec 20, 2023

Attn: JOYCE WONG/DEREK HUI

Sample and Information provided by customer :
Item Name : **Antibacterial stylus ballpen**
Item No. : **MO6153**
Quantity : 15 pieces
Packaging Provided : No
Vendor : 104901
Country of Origin : China

Conclusion:

The submitted sample was tested under the following requirements requested by the applicant, subject to the information stated in the remark and attached page(s) for details :

<u>Requirement</u>	<u>Result</u>
(1) ISO 22196:2011 - Measurement of antibacterial activity on plastics and other non-porous surfaces	See details enclosed

Decision Rule(s):

When a statement of conformity to a specification or standard is provided on test report, the decision rule shall be applied. For details, please refer to Intertek's "Decision Rule Document" and is available on Intertek's website. <https://intertekhk.grd.by/decision-rule-doc>. If decision rule already inhaled in the requested specification or standard, Intertek's "Decision Rule Document" is not applicable and indication of "∞" was shown as above table.

For and on behalf of :
Intertek Testing Services HK Ltd.

Dorothy M.Y. Lau
Vice President



TEST REPORT

Number : HKGH03078338

(1) Measurement of antibacterial activity on plastics and other non-porous surfaces

Test Standard : International Standard ISO 22196:2011.

Test culture: *Escherichia coli* (ATCC 8739) – 2.7x10⁵ CFU/mL
Staphylococcus aureus (ATCC 6538P) - 4.1x10⁵ CFU/mL

Test specimen: 50 mm x 50 mm flat square of submitted sample
 50 mm x 50 mm flat square of untreated sample as control

Neutralizing solution: D/E neutralizing broth

Contact time / temperature: 24 hours / 35°C

Agar medium: Plate Count Agar

Incubation period / temperature of agar: 48 hours / 35°C

Test condition: 0.4 mL bacterial inoculum was added onto one surface of the test specimen sample

Result :

Test microorganism	U _o Criteria: 3.7 ≤ U _o ≤ 4.4	U _t Criteria: U _t ≥ 1.8	A _t	Log R	% R	Comment*
<i>Escherichia coli</i>	3.75	5.87	0	5.87	99.999	Significant
<i>Staphylococcus aureus</i>	3.86	4.66	0	4.66	99.99	Significant

Remark : U_o = Log (bacteria recovered from untreated specimen in CFU/cm²) immediately after inoculation
 U_t = Log (bacteria recovered from untreated specimen in CFU/cm²) after 24 hours incubation
 A_t = Log (bacteria recovered from treated specimen in CFU/cm²) after 24 hours incubation
 R = Log reduction value (U_t - A_t)

Reference Rating*:	%R	Antibacterial activity
	≤90%	Not acceptable
	>90 - <99%	Insignificant
	≥99%	Significant

Sample received condition: Samples in closed plastic bags.

Date sample received : Dec 06, 2023
 Testing period : Dec 11, 2023 to Dec 19, 2023



TEST REPORT

Number : HKGH03078338



End of report

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to and subject to our standard Terms and Conditions which can be obtained at our website: <http://www.intertek.com/terms/>. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Intertek is responsible for all the information provided in the reports, except when information is provided by the Client or when the Client requires the item to be tested acknowledging a deviation from specified conditions that can affect the validity of results.

The observations and test results in this report are relevant to the sample(s) tested and submitted by client. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. This report does not discharge or release you from your legal obligations and duties to any other person. Only the Client is authorized to permit copying or distribution of this report and the report shall not be reproduced except in full. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

