

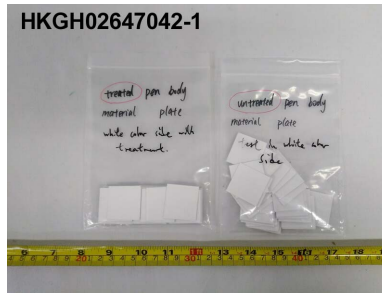
TEST REPORT

Applicant: MID OCEAN BRANDS BV
7/F, KINGS TOWER,
111 KING LAM STREET,
CHEUNG SHA WAN,
KOWLOON
HK
Attn: GARY YUEN

Number: HKGH02647042

Date: Oct 28, 2020

Submitted sample said to be :
Item Name : **Antibacterial twist ball pen**
Item No. : **MO6138**
Quantity : 60 pieces
Vendor : 110658
Country of Origin : China
Remark : 1st Retest for our previous report HKGH02636823 dated Sep 22, 2020



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 :

Requirement	Result
(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.

Cindy I.K. Chan
Vice President



TEST REPORT

Number : HKGH02647042

(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) – 7.1×10^5 CFU/mL
Staphylococcus aureus (ATCC 6538P) – 7.5×10^5 CFU/mL

Test specimen: 30 mm x 30 mm flat square of submitted sample
30 mm x 30 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: 0.2 mL bacterial inoculum was added onto white surface of the test specimen sample



TEST REPORT

Number : HKGH02647042

Result :

Test microorganism	<i>Escherichia coli</i>	<i>Staphylococcus aureus</i>
Concentration of inoculum (CFU/cm ²)	3.6×10 ⁴	3.8×10 ⁴
Average for the number of bacteria recovered from treated specimen after 24 hours incubation (CFU/cm ²)	4	<1
Percent reduction of bacteria *	99.9 %	99.9 %

Remark : * = The result is inconclusive as the untreated sample shows antibacterial function. Therefore, the inoculum counting was used for the calculation of % reduction.

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

Sample received condition: Samples in closed plastic bags.

Date sample received : Oct 14, 2020
 Testing period : Oct 19, 2020 to Oct 27, 2020

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.

