

TEST REPORT

Applicant: MID OCEAN BRANDS BV 7/F, KINGS TOWER, 111 KING LAM STREET, CHEUNG SHA WAN, KOWLOON HK Attn: JOYCE WONG/DEREK HUI Number: HKGH03057107

Date: Oct 06, 2023

Sample and Information provided by customer:Item Name:AntibacteriItem No.:MO6138Style:2 asst styleQuantity:1 pack per stylePackaging Provided:NoVendor:110658Country of Origin:China

Antibacterial twist ball pen MO6138 2 asst style 1 pack per style No 110658 China



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

Cindy I.K. Chan Vice President



Intertek Testing Services Hong Kong Limited

2/F Garment Centre 576 Castle Peak Road Kowloon, Hong Kong Tel +852 2173 8888 Fax +852 2786 1903 intertek.com.hk





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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 ISO 22196:2011 - Measurement of antibacterial activity on plastics and other non-porous See details enclosed (1)surfaces

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. <u>https://intertekhk.grd.by/decision-rule-doc.</u> If decision rule already inhered in the requested specification or standard, Intertek's "Decision Rule Document" is not applicable and indication of "..." was shown as above table.



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(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) – 4.8x10 ⁵ CFU/mL Staphylococcus aureus (ATCC 6538P) – 5.8x10 ⁵ 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 white surface of the test

specimen sample

Result :

Test microorganism	U₀ Criteria: 3.7 ≤ U₀ ≤ 4.4	U _t Criteria: U _t ≥ 1.8	A _t	Log R	% R	Comment*
Escherichia coli	4.00	5.74	1.99	3.75	99.9	Significant
Staphylococcus aureus	4.15	4.82	1.49	3.33	99.9	Significant

= Log (bacteria recovered from untreated specimen in CFU/cm²) immediately after Remark : U_o inoculation

- = Log (bacteria recovered from untreated specimen in CFU/cm²) after 24 hours incubation Ut
- = Log (bacteria recovered from treated specimen in CFU/cm²) after 24 hours incubation A_t R
 - = Log reduction value $(U_t A_t)$

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

Sample received condition: Samples in closed plastic bags.





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Date sample received : Sep 25, 2023 Testing period : Sep 27, 2023 to Oct 05, 2023

End of report

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