中国认可
国际互认
检测
TESTING
CNAS L6478

TEST REPORT

Reference No.	:	WTF20F09064969A1C
Applicant	:	Mid Ocean Brands B.V.
Address	:	7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
Manufacturer	:	110658
Sample Name	:	antibacterial twist ball pen
Model No.	:	MO6138
Test Requested	:	1) Determination of Lead content in the submitted sample in accordance with REACH regulation Annex XVII Entries 63 (EC) No. 1907/2006 and the amendment No. 836/2012 and (EU) 2015/628 2) Determination of Cadmium content in the submitted sample in accordance with REACH regulation Annex XVII Entries 23 (EC) No. 1907/2006 and the amendment No. 552/2009, No. 494/2011, No. 835/2012 and (EU) 2016/217 3) Nickel content requirement in Annex XVII Item 27 of the REACH Regulation (EC) No. 1907/2006 & amendment No.552/2009 (formerly known as Directive 94/27/EC and 2004/96/EC)
Test Method	:	Please refer to next page (s)
Test Conclusion	:	Please refer to next page (s)
Date of Receipt sample	:	2020-09-10 & 2020-10-10
Date of Test	:	2020-09-10 to 2020-10-20
Date of Issue	:	2020-10-20
Test Result	:	Please refer to next page (s)
Note	:	As specified by client, only test the designated sample.

Remarks:
The results shown in this test report refer only to the sample(s) tested; this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.
If the report is not stamped with the accreditation recognized seal, it will only be used for scientific research, education, and internal quality control activities, and is not used for the purpose of issuing supporting data to the society.

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Approved by: Swing Liang
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Test Result:

1) Lead (Pb)

Test Method: With reference to IEC 62321-5:2013, the analysis was performed by ICP-OES.

Test Item	LOQ (mg/kg)	Results (mg/kg)			Limit (mg/kg)
		No.1+No.6	No.2	No.3	
Lead(Pb)	2	ND*	ND	ND	500
Conclusion	--	**Pass**	**Pass**	**Pass**	--

Test Item	LOQ (mg/kg)	Results (mg/kg)			Limit (mg/kg)
		No.4	No.5	No.7	
Lead(Pb)	2	ND	ND	ND	500
Conclusion	--	**Pass**	**Pass**	**Pass**	--

Test Item	LOQ (mg/kg)	Results (mg/kg)			Limit (mg/kg)
		No.8	No.9	No.10	
Lead(Pb)	2	ND	ND	ND	500
Conclusion	--	**Pass**	**Pass**	**Pass**	--

Note:

(1) mg/kg = milligram per kilogram

(2) ND = Not Detected (lower than LOQ)

(3) LOQ = Limit of quantitation

(4) Limit of Lead was quoted from REACH regulation Annex XVII Item 63 (EC) No. 1907/2006 and the amendment No. 836/2012 and (EU) 2015/628.

(5) "*" = Results are calculated by the minimum weight of mixed components.

2) Cadmium (Cd)

Test Method: With reference to IEC 62321-5:2013, the analysis was performed by ICP-OES.

Test Item	LOQ (mg/kg)	Results (mg/kg)		
		No.1+No.6	No.2	No.7
Cadmium(Cd)	2	ND*	ND	ND
Conclusion	--	**Pass**	**Pass**	**Pass**

Test Item	LOQ (mg/kg)	Results (mg/kg)		
		No.8	No.9	No.10
Cadmium(Cd)	2	ND	ND	ND
Conclusion	--	**Pass**	**Pass**	**Pass**

Note:

(1) mg/kg = milligram per kilogram

(2) ND = Not Detected (lower than LOQ)

(3) LOQ = Limit of quantitation

(4) Limit of Cadmium according to REACH regulation Annex XVII Item 23 (EC) No. 1907/2006 and the amendment No. 552/2009, No. 494/2011 and No. 835/2012 and (EU) 2016/217.

Category	Limit (mg/kg)
Wet paint	100
Surface coating	1000
Plastic	100
Metal parts of jewellery and hair accessories	100

(5) "*" = Results are calculated by the minimum weight of mixed components.

3) Nickel release

Test method: With reference BS EN 12472:2005+A1:2009&BS EN1811:2011+A1:2015, Nickel content was determined by Inductively Coupled Argon Plasma Spectrometry

Item No.	Sample Area (cm^2)	Volume of Test Solution(ml)	Nickel release (μg/cm²/week)				Conclusion
			Trial 1	Trial 2	Trial 3	Average	
No.2	23.19	25	ND	ND	ND	ND	**Pass**
No.4	10.37	10	ND	ND	ND	ND	**Pass**
No.5	8.26	10	ND	ND	ND	ND	**Pass**

Note:

(1) μg/cm²/week = microgram per square centimetre per week

(2) Limit of quantitation = 0.05 μg/cm^2/week

(3) ND = Not detected or less than the value of Limit of quantitation

(4) Interpretation of test results:

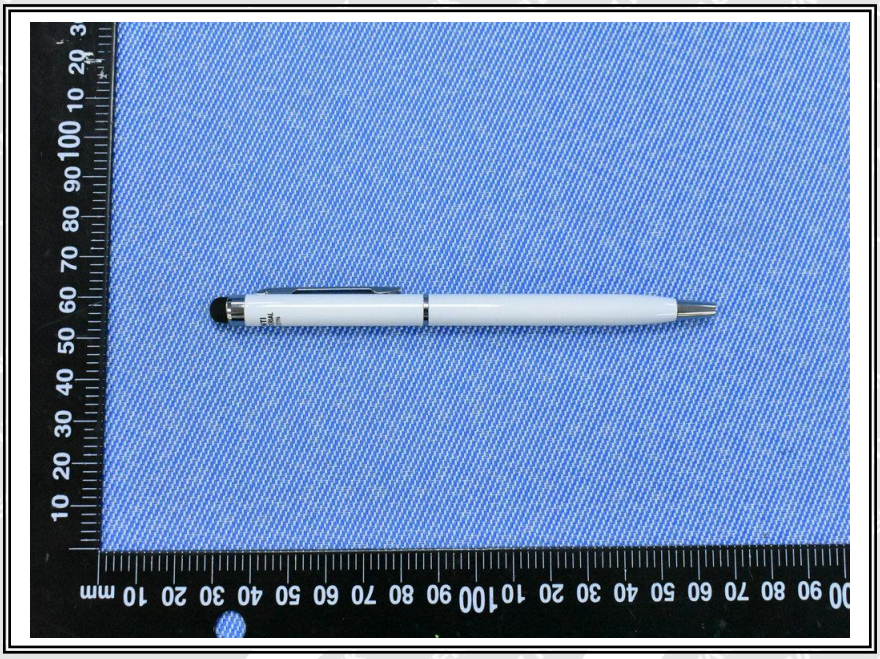
Type of sample	Nickel Release(μg/cm²/week)	
	Pass	Fail
Other components in direct and prolonged contact with the skin	<0.88	≥0.88
Post assemblies and body piercings (Post assemblies which are inserted into pierced parts of the human body)	<0.35	≥0.35

(5) The testing standard “BS EN 12472:2005+A1:2009” does not been accredited by CNAS

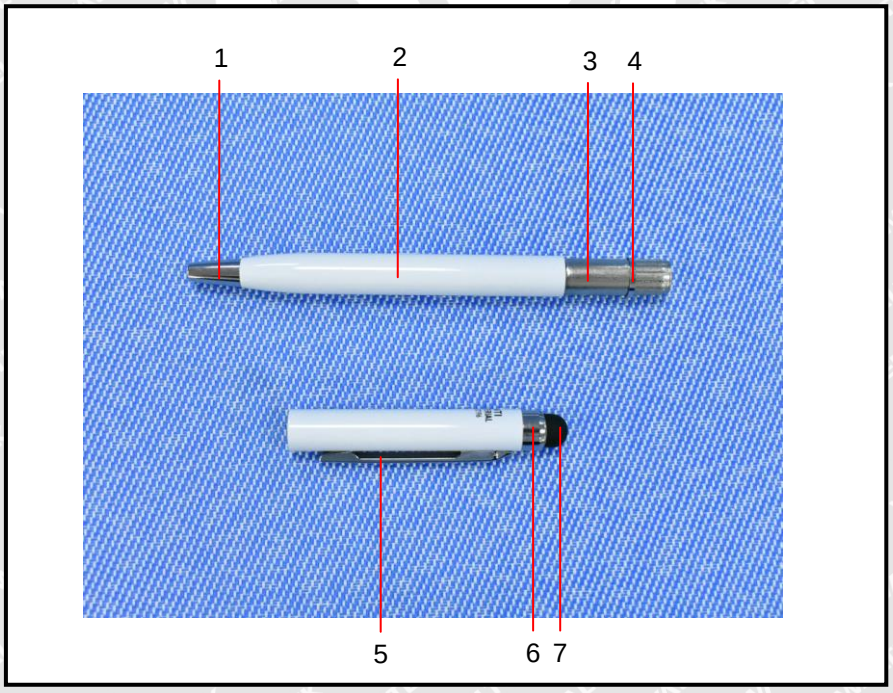
Test Specimen Description:

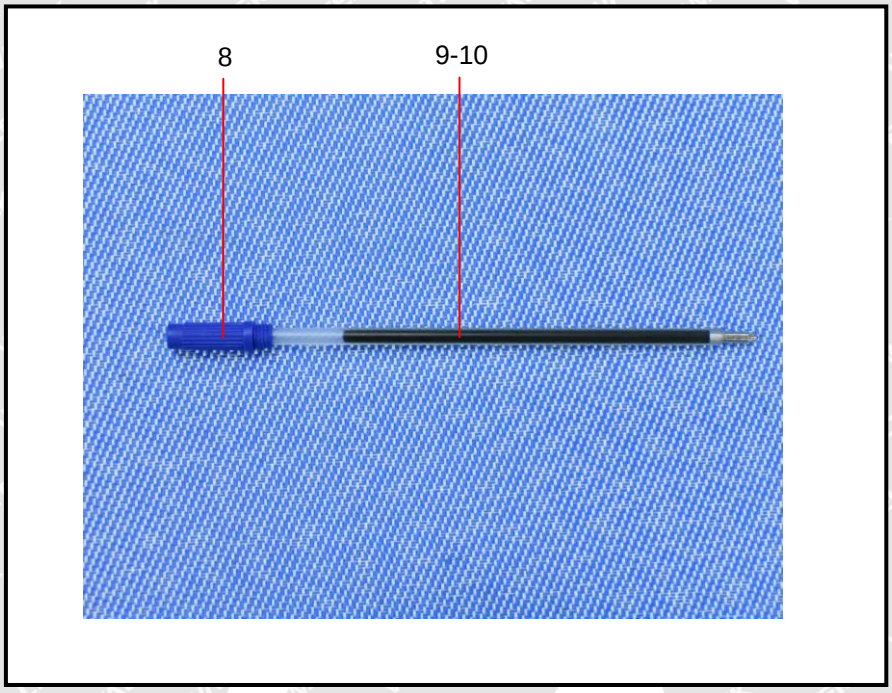
No.1: White plastic cap with silvery plating
No.2: Silvery metal barrel with white coating
No.3: Silvery metal tube
No.4: Silvery metal ring
No.5: Silvery metal clip
No.6: White plastic cap with silvery plating
No.7: Black soft plastic cap
No.8: Blue plastic end
No.9: Transparent plastic refill
No.10: Blue ink

Sample photo:



Photographs of parts tested:





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