

TEST REPORT

Applicant Name: Mid Ocean Brands B.V.
Address: Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer Name: Mid Ocean Brands B.V.
Address: Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Sample Description: smart band
Main Model(s): MO2270
Additional Model(s): /
Trade Mark: /
Sample Received Date: Sept. 10, 2026
Testing Period: Sept. 10, 2026 to Sept. 18, 2026
Date of Issue: Sept. 18, 2026
Test Requested: Select test(s) as requested by the client
Test Method(s): Please refer to next page(s)
Test Result(s): Please refer to next page(s)

Test Requirement

EU RoHS Directive (EU)2015/863 amending Annex II to Directive 2011/65/EU
—Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) Content
—Bis(2-ethylhexyl)-phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP) Content

Conclusion

PASS

PASS

Testing procedure and testing location:

Testing Laboratory.....:

**Guangdong Zhonghan Testing Technology Co.,
Ltd.**

Address.....:

Room 104/201, Building 1, Yibaolai Industrial Park,
Qiaotou, Fuhai Subdistrict, Bao'an District, Shenzhen,
Guangdong, China

Approved By (Name + Signature).....:

Eric Lu





1. Test Method(s):

Test item(s)	Test Method(s)	Equipment(s)
Screening Analysis By XRF		
Lead (Pb)	IEC 62321-3-1:2013	ED-XRF
Cadmium (Cd)		
Mercury (Hg)		
Chromium (Cr)		
Bromine (Br)		
Chemical Testing		
Mercury (Hg)	IEC 62321-4:2013+A1:2017	ICP-OES
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
PBB	IEC 62321-6:2015	GC-MS
PBDE		
Chromium(Cr VI) for colourless and coloured corrosion-protected coatings on metals	IEC 62321-7-1:2015	UV-Vis
Chromium(Cr VI) for polymers and electronics	IEC 62321-7-2:2017	UV-Vis
DEHP	IEC 62321-8:2017	GC-MS
DBP		
BBP		
DIBP		

**2. Test Result(s):****Lead, Mercury, Cadmium, Chromium(Cr VI), PBB and PBDE content**

Part No.	Sample Description	Conclusion Of ED-XRF						Result of Wet Chemical Testing(mg/kg)
		Pb	Cd	Hg	Cr(VI)▼	PBB	PBDE	
1	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
2	Copper alloy	BL	BL	BL	BL	N.A.	N.A.	N.A.
3	Black rubber	BL	BL	BL	BL	BL	BL	N.A.
4	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
5	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
6	Champagne-colored sponge	BL	BL	BL	BL	BL	BL	N.A.
7	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
8	Silvery metal	BL	BL	BL	BL	N.A.	N.A.	N.A.
9	Golden cladding metal PIN	BL	BL	BL	BL	N.A.	N.A.	N.A.
10	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
11	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
12	Yellow plastic	BL	BL	BL	BL	BL	BL	N.A.
13	Black plastic wire jacket	BL	BL	BL	BL	BL	BL	N.A.
14	Red plastic wire jacket	BL	BL	BL	BL	BL	BL	N.A.
15	Blue plastic wire jacket	BL	BL	BL	BL	BL	BL	N.A.
16	Red plastic wire jacket	BL	BL	BL	BL	BL	BL	N.A.
17	Transparent solid material	BL	BL	BL	BL	BL	BL	N.A.



Part No.	Sample Description	Conclusion Of ED-XRF						Result of Wet Chemical Testing(mg/kg)
		Pb	Cd	Hg	Cr(VI)▼	PBB	PBDE	
18	Silvery metal	BL	BL	BL	BL	N.A.	N.A.	N.A.
19	Silvery metal	BL	BL	BL	BL	N.A.	N.A.	N.A.
20	Green cladding PCB board	BL	BL	BL	BL	BL	BL	N.A.
21	Silvery metal	BL	BL	BL	BL	N.A.	N.A.	N.A.
22	Silvery metal	BL	BL	BL	BL	N.A.	N.A.	N.A.
23	Copper-colored metal	BL	BL	BL	BL	N.A.	N.A.	N.A.
24	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
25	Translucent plastic	BL	BL	BL	BL	BL	BL	N.A.
26	White plastic	BL	BL	BL	BL	BL	BL	N.A.
27	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
28	Blue plastic	BL	BL	BL	BL	BL	BL	N.A.
29	Transparent glass w/black coating	BL	BL	BL	BL	N.A.	N.A.	N.A.
30	Translucent plastic	BL	BL	BL	BL	BL	BL	N.A.
31	White plastic	BL	BL	BL	BL	BL	BL	N.A.
32	Golden cladding metal PIN	BL	BL	BL	BL	N.A.	N.A.	N.A.
33	Black plastic	BL	BL	BL	BL	BL	BL	N.A.
34	Black triode SMD	BL	BL	BL	BL	BL	BL	N.A.
35	Black IC SMD	BL	BL	BL	BL	BL	BL	N.A.



Part No.	Sample Description	Conclusion Of ED-XRF						Result of Wet Chemical Testing(mg/kg)
		Pb	Cd	Hg	Cr(VI)▼	PBB	PBDE	
36	Silvery metal	BL	BL	BL	IN	N.A.	N.A.	Cr(VI):Negative
37	Silvery metal	BL	BL	BL	BL	N.A.	N.A.	N.A.
38	Black IC SMD	BL	BL	BL	BL	BL	BL	N.A.
39	Solder	BL	BL	BL	BL	N.A.	N.A.	N.A.
40	Silvery metal	BL	BL	BL	IN	N.A.	N.A.	Cr(VI):Negative
41	Blue cladding PCB board	BL	BL	BL	BL	BL	BL	N.A.
42	Silvery metal (USB)	BL	BL	BL	BL	N.A.	N.A.	N.A.
43	Black soft plastic plug	BL	BL	BL	BL	BL	BL	N.A.
44	Black soft plastic cable jacket	BL	BL	BL	BL	BL	BL	N.A.
45	Black plastic wire jacket	BL	BL	BL	BL	BL	BL	N.A.
46	Red plastic wire jacket	BL	BL	BL	BL	BL	BL	N.A.
47	Black soft plastic plug	BL	BL	BL	BL	BL	BL	N.A.
48	Solder	BL	BL	BL	BL	N.A.	N.A.	N.A.
49	White plastic	BL	BL	BL	BL	BL	BL	N.A.
50	Solder	BL	BL	BL	BL	N.A.	N.A.	N.A.
51	Copper alloy	OL	BL	BL	BL	N.A.	N.A.	Pb:15462#

Notes:

(1) Interpretation of screening results by X-ray fluorescence spectrometry (XRF):

(a) Table A.2 of IEC 62321-3-1:2013 gives an example of a scheme for interpreting results at sample limits and given safety factors. Table A.2- Screening limits in mg/kg for regulated





elements in various matrices.

Element	Polymers	Metals	Composite Material
Cd	$BL \leq (70-3\sigma) < IN < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < IN < (130+3\sigma) \leq OL$	$LOD < IN < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < IN < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < IN < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < IN$	Not applicable	$BL \leq (250-3\sigma) < IN$
Cr	$BL \leq (700-3\sigma) < IN$	$BL \leq (700-3\sigma) < IN$	$BL \leq (500-3\sigma) < IN$

(b) For regulated substances[polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs)], the results showed the total Br content, while for regulated substance Cr(VI), the results showed the total Cr content. If the quantitative results for the elements Br and/or Cr are higher than the limit (for Br calculated based on the stoichiometry of Br in the most common congeners of PBB/PBDE), the sample is "inconclusive".

(c) Results are obtained by ED-XRF for primary screening, LOD = Limit of Detection, BL = Below Limit, OL= Over Limit, IN (The symbol X marks the region)=Inconclusive, where further investigation is necessary, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBB/PBDE) are recommended to be performed.

(d) The ED-XRF screening test for elements-The reading may be different to the actual content in the sample be of non-uniformity composition.

(2) Interpretation of results by chemical tests.

(a) mg/kg = ppm = milligram per kilogram = 0.0001%, N.D. = No Detection(<MDL), N.A. = Not Applicable.

(b) Unit and Method Detection Limit(MDL) in wet chemical testing.

Test Item(s)	Pb	Cd	Hg	Cr(VI)		PBB	PBDE
Units	mg/kg	mg/kg	mg/kg	mg/kg	$\mu\text{g}/\text{cm}^2$	mg/kg	mg/kg
MDL	2	2	2	8	0.10	5	5

The MDL for single compound of PBBs and PBDEs is 5mg/kg.

The MDL of Cr(VI) for polymers and electronics sample is 8mg/kg.

The MDL of Cr(VI) for colourless and coloured corrosion-protected coatings on metal sample is $0.10\mu\text{g}/\text{cm}^2$.

(c) ▼ = Metal sample

According to IEC 62321-7-1:2015, determined of Cr(VI) on metal sample by boiling water extraction test method, and result is shown as Positive/Negative.

Boiling water extraction:

Negative = Absence of Cr(VI) coating, the detected concentration in boiling water extraction solution is less than $0.10\mu\text{g}/\text{cm}^2$.

Positive = Presence of Cr(VI) coating, the detected concentration in boiling water extraction solution is greater than $0.13\mu\text{g}/\text{cm}^2$.

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

(3) Requirement as per EU RoHS Directive 2011/65/EU.

Test Item(s)	Limits Requirement
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)



Chromium (VI) (Cr(VI))	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1%(1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

(4) As specified by client, only test the designated sample.

(5) This column represents the exempted decoration of material or other related testing sample's information.

According to the declaration from the client, lead in specimen(s) is exempted by EU RoHS Directive 2011/65/EU annex III and its amendment base on:

Sample is copper alloy. The lead content which is under 4% (40000ppm) is exempted from the requirement of RoHS Directive (2011/65/EU).

**Phthalates (DEHP, BBP, DBP, DIBP) content**

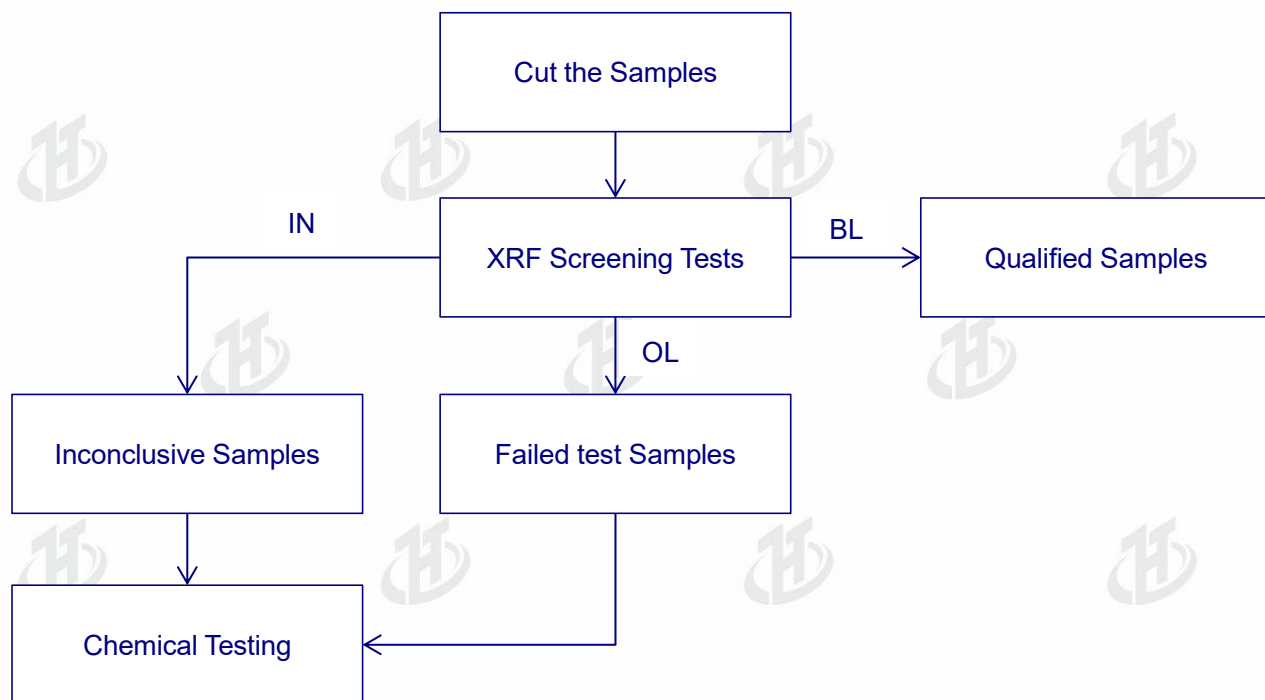
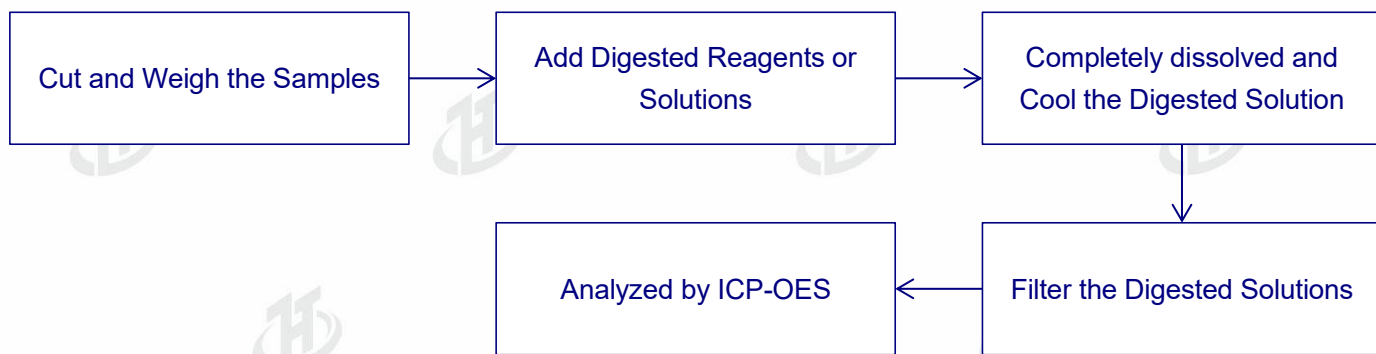
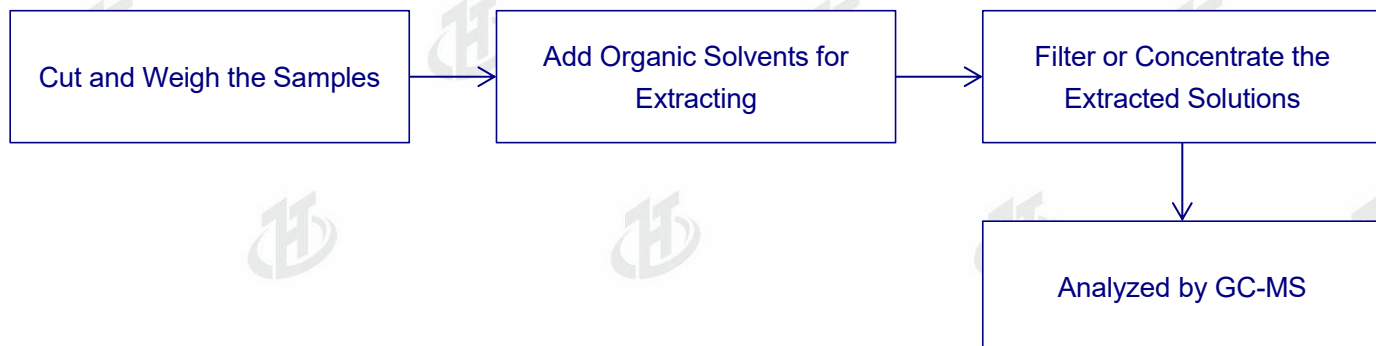
Part No.	Result of Chemical Testing(mg/kg)			
	DIBP	DBP	BBP	DEHP
1+4+7	N.D.	N.D.	N.D.	N.D.
3	N.D.	N.D.	N.D.	N.D.
5+6+10	N.D.	N.D.	N.D.	N.D.
11+12	N.D.	N.D.	N.D.	N.D.
13+14	N.D.	N.D.	N.D.	N.D.
15+16+17	N.D.	N.D.	N.D.	N.D.
20+41	N.D.	N.D.	N.D.	N.D.
24+25+31	N.D.	N.D.	N.D.	N.D.
26+27+28	N.D.	N.D.	N.D.	N.D.
30+33	N.D.	N.D.	N.D.	N.D.
34+35+38	N.D.	N.D.	N.D.	N.D.
43+44+47	N.D.	N.D.	N.D.	N.D.
45+46	N.D.	N.D.	N.D.	N.D.
49	N.D.	N.D.	N.D.	N.D.

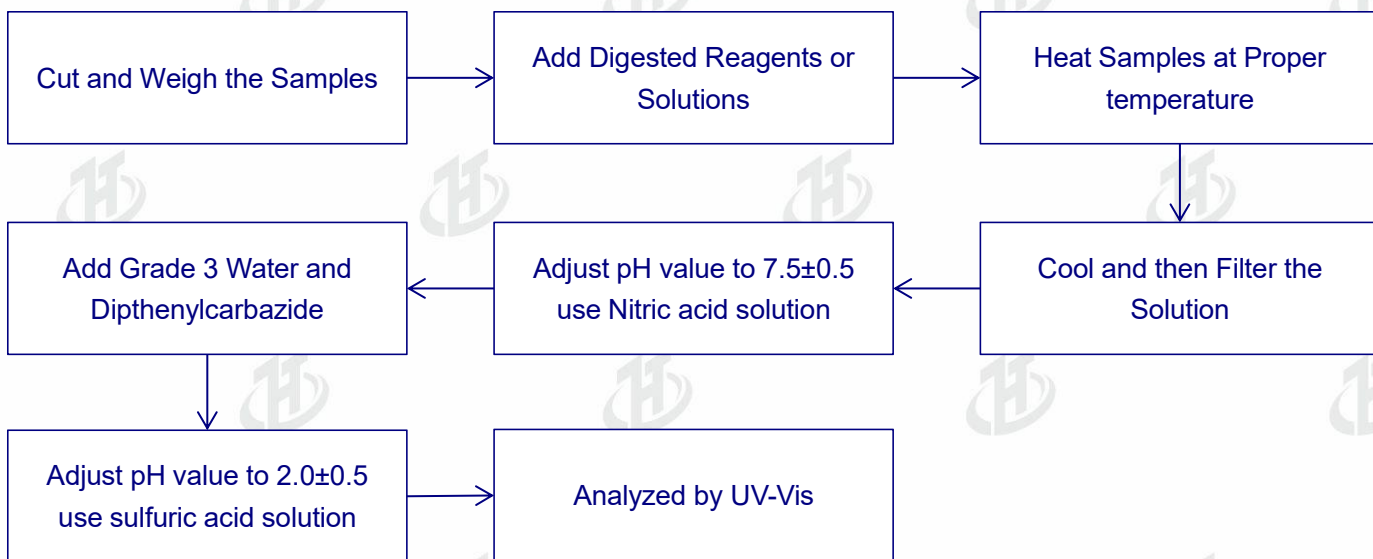
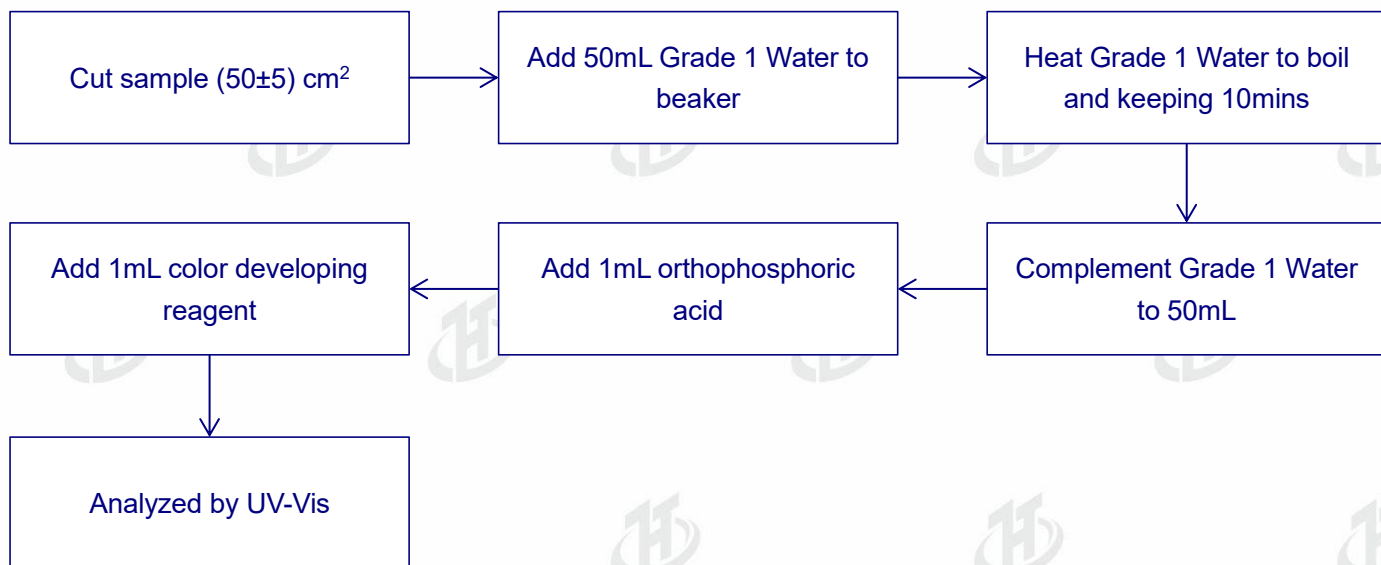
Notes:

- (1) mg/kg = ppm = milligram per kilogram = 0.0001%.
- (2) N.D. = No Detection(<MDL).
- (3) N.A. = Not Applicable.
- (4) Requirement as per EU RoHS amendment Directive EU 2015/863. Unit and Method Detection Limit(MDL) in chemical testing.

Test Item(s)	DIBP	DBP	BBP	DEHP
Cas No.	84-69-5	84-74-2	85-68-7	117-81-7
Units	mg/kg			
MDL	50	50	50	50
Limits Requirement	1000	1000	1000	1000

- (5) Abbreviation: "DBP" denotes Dibutyl phthalate (DBP), "BBP" denotes Benzyl butyl phthalate (BBP), "DEHP" denotes Bis(2-ethylhexyl)-phthalate (DEHP), "DIBP" denotes Diisobutyl phthalate (DIBP).
- (6) As specified by client, only test the designated sample.
- (7) As specified by client, the submitted samples were mixed. Results are calculated by the minimum weight of mixed components.

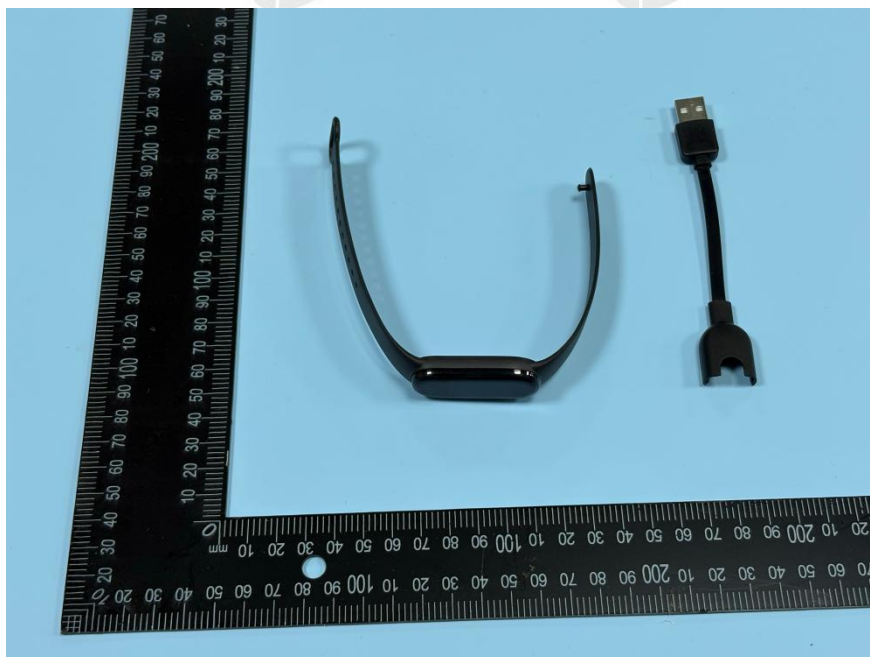
**Attachment A : Measurement Flow chart****1. ED-XRF Scan****2. Lead, Cadmium, Mercury****3. PBBs & PBDEs, Phthalates**

**4. Chromium(Cr VI) (Non-metal)****5. Chromium(Cr VI) (Metal)**

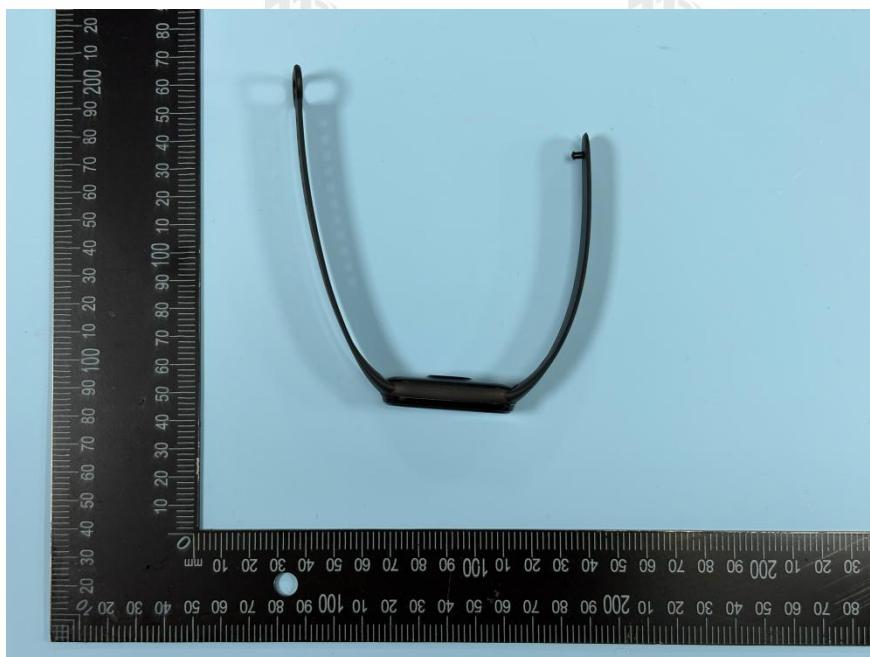


Attachment B : Sample Photo

1.

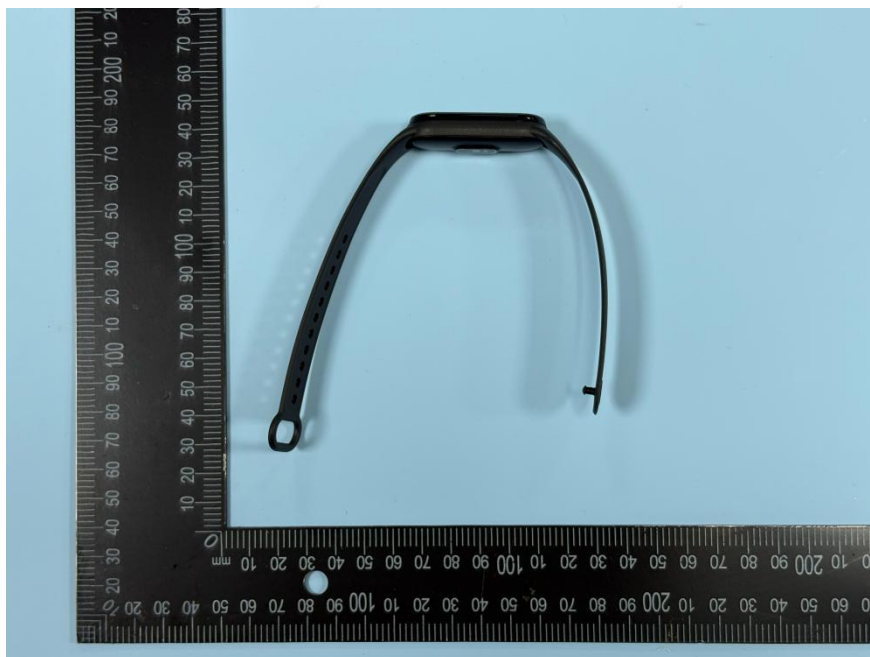


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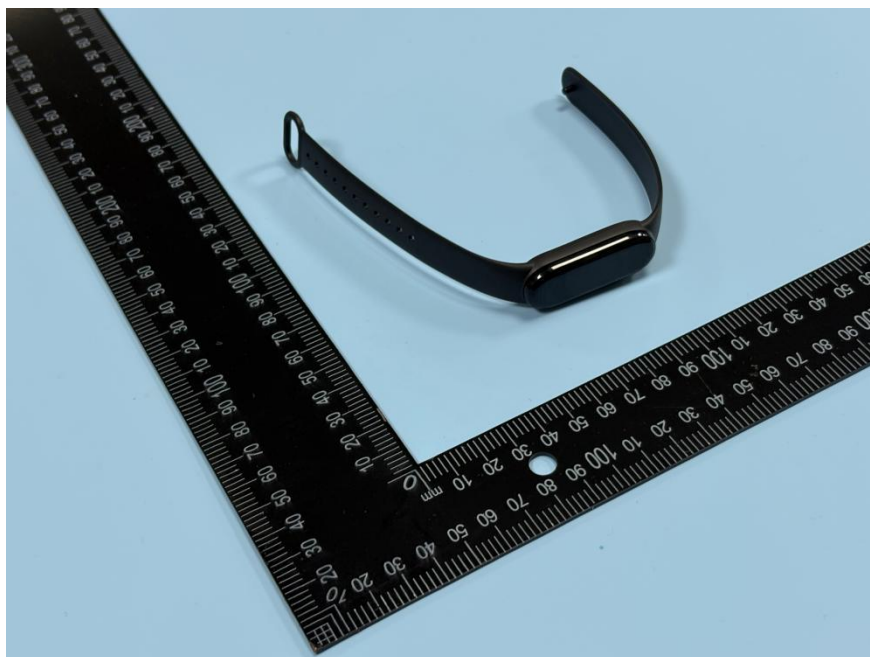




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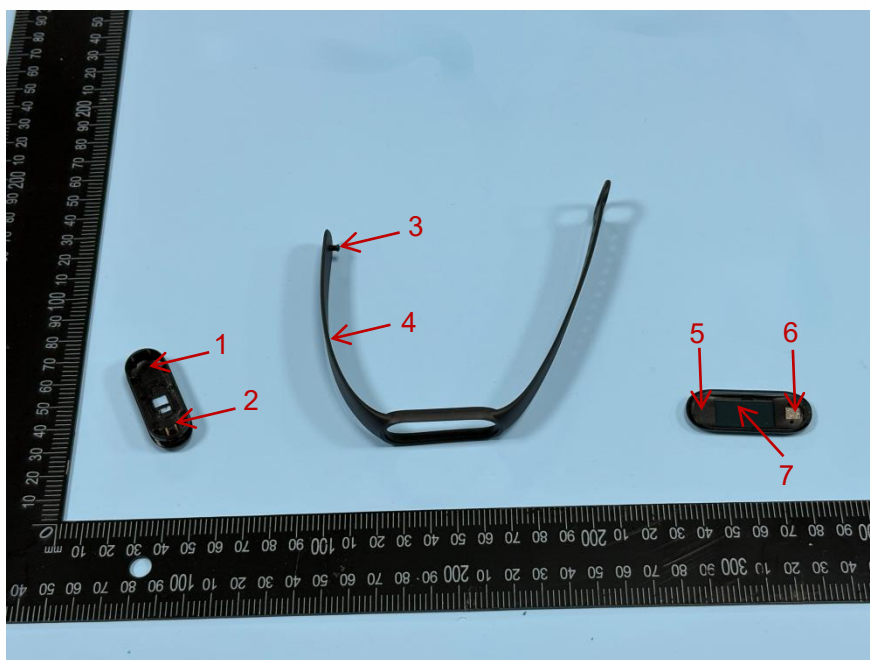




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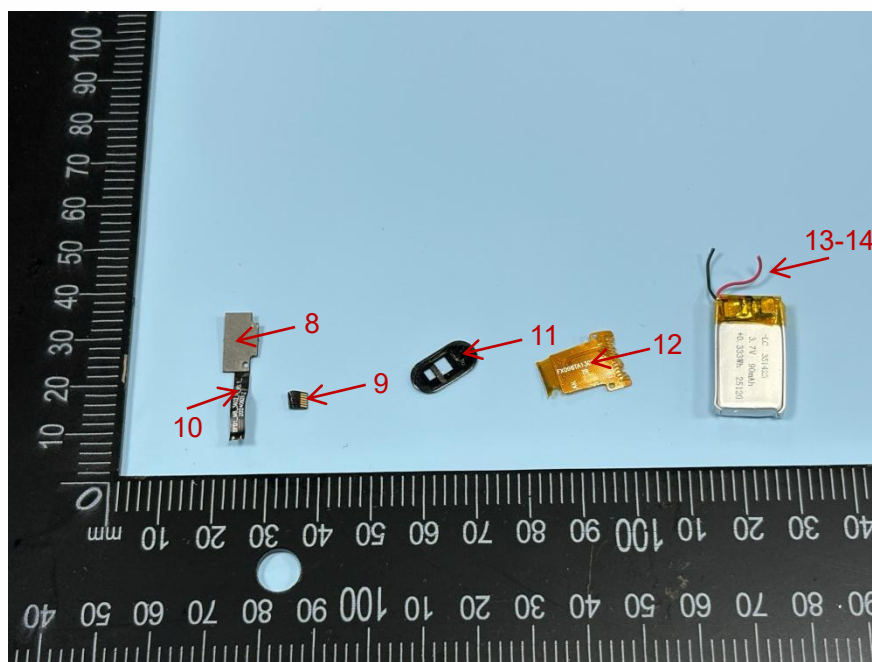


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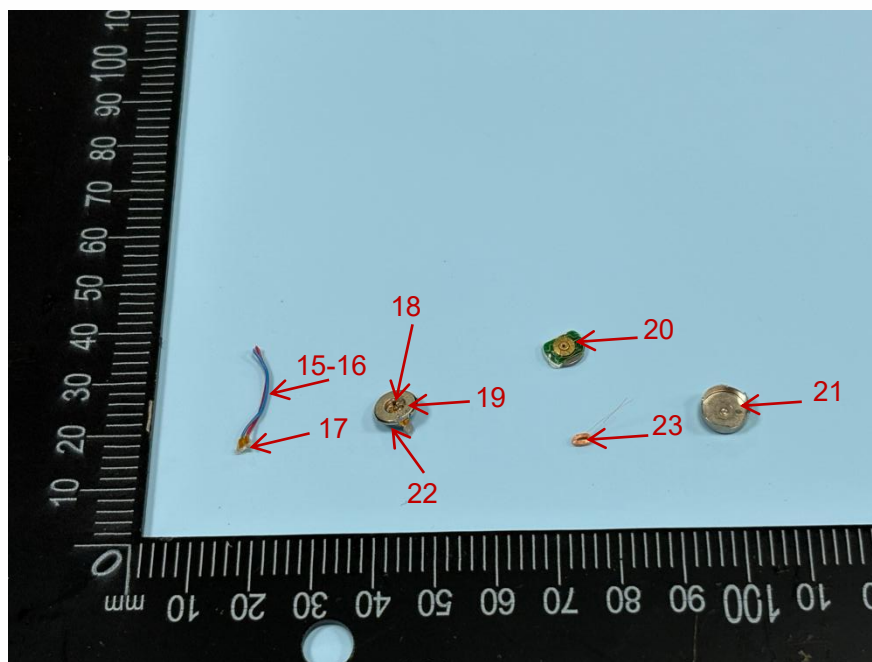




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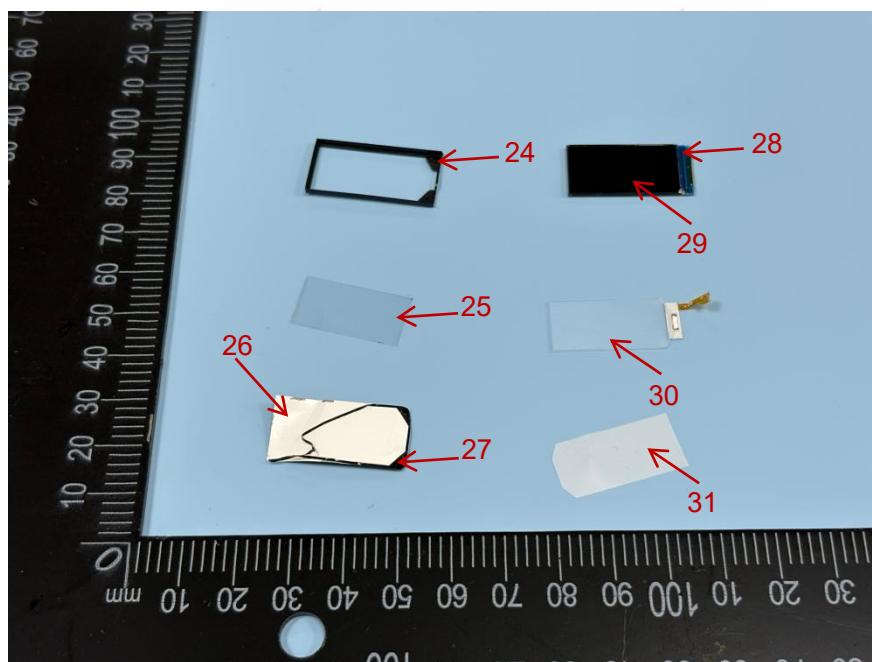


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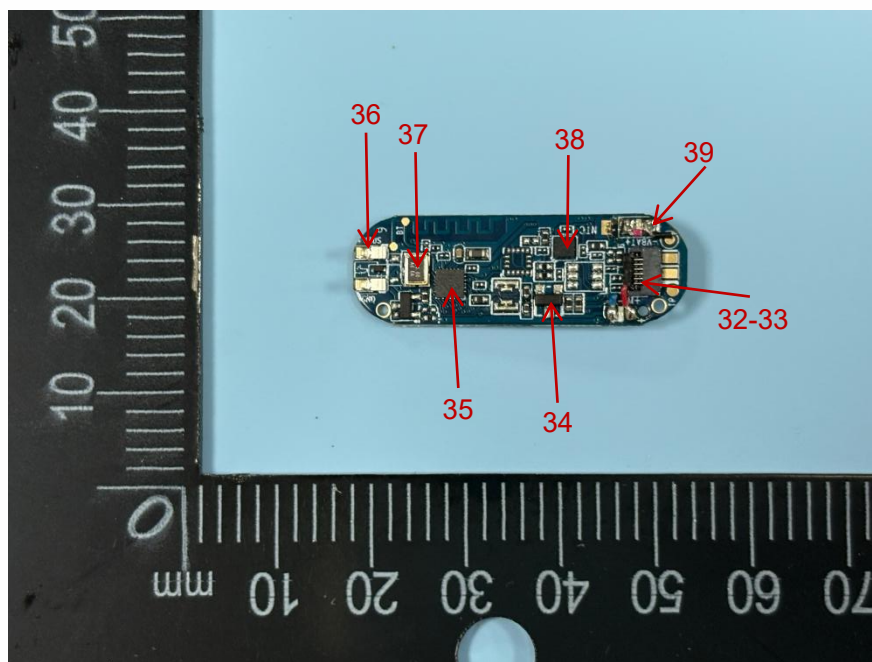




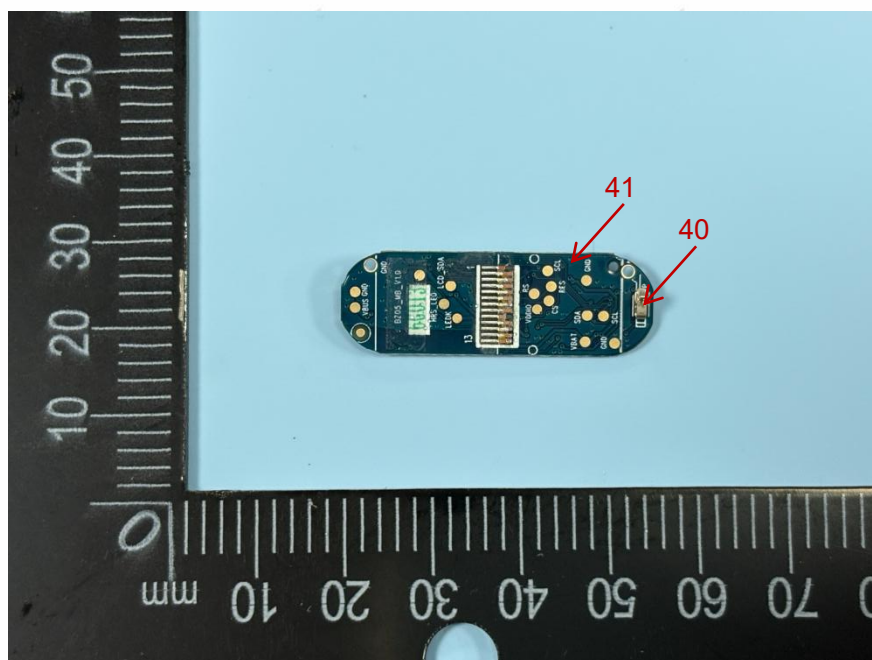
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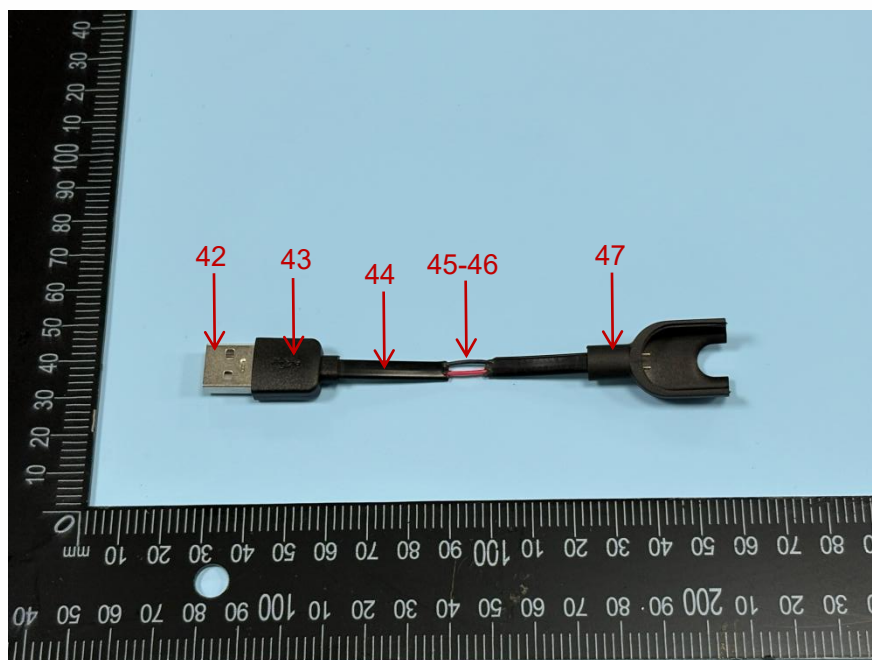
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11.

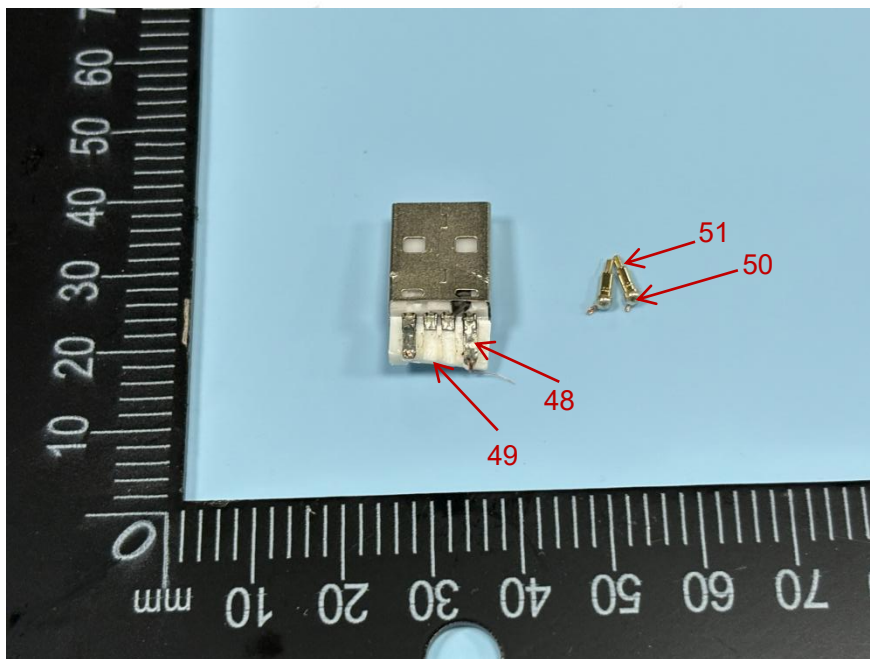


12.





13.



ZHT authenticate the photo on original report only

===== End of Test Report =====

Statement

1. The information as listed on the first page of this test report was all provided by the client except the received date, testing period, test result(s) and test request. The client shall be responsible for the representativeness of sample and authenticity of materials, for which Guangdong Zhonghan Testing Technology Co., Ltd. shall bear no responsibilities.
2. Unless otherwise stated the results shown in this report refer only the Main Model(s) sample(s) tested and does not bear other joint and several liabilities. As specified by client, only test the designated sample.
3. The test report is invalid without the signature of the approving person and the “special seal for inspection and testing”. This report shall not be altered, increased or deleted.
4. Without written approval of Guangdong Zhonghan Testing Technology Co., Ltd., this report shall not be reproduced in part or published as advertisement. and the duplicate report shall be invalid if the special seal for inspection and testing is not re-affixed.
5. Objection should be issued in 15 days upon receiving the report, overdue opinion is inadmissible.
6. If the report is not stamped with the qualification identification mark, it is only used for scientific research, teaching, internal quality control, the client internal using and other activities, and cannot be used as the purpose of providing the society with data with certification function.

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