



TEST REPORT

Applicant: Yongkang jiebu industry and Trade Co., Ltd
Address: No. 6, yililai Road, Fangyan industrial functional zone, Yongkang City, Zhejiang Province, China
Manufacturer: Yongkang jiebu industry and Trade Co., Ltd
Address: No. 6, yililai Road, Fangyan industrial functional zone, Yongkang City, Zhejiang Province, China
Product Name: Hydrogen rich water cup
Trade Mark: N/A
Model Number: AR-08
Series Model No.: AR-01, AR-02, AR-03, AR-04, AR-05, AR-06, AR-07, AR-09, AR-10, AR-11, AR-12, AR-13
Prepared By: Shenzhen DL Testing Technology Co., Ltd.
Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China
Date of Receipt: Jun. 07, 2022
Date of Test: Jun. 07, 2022 - Jun. 29, 2022
Date of Report: Jun. 30, 2022
Test Requested: With reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU.
Test Standard: Please refer to next page(s).
Test Results: Please refer to next page(s).

Conclusion:

As requested by applicant, the submitted sample was/were tested, with is listed as specimen description in the following page. the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Prepared (Engineer): Becky Xu

Approved (Manager): Jade Yang



This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.

**Version**

| Version No. | Date | Description |
|-------------|---------------|-------------|
| 00 | Jun. 30, 2022 | Original |

Remark:

(1) There are the results on total Br while test items on restricted substances are PBBs and PBDEs. There are the results on total Cr while test items on restricted substances Cr(VI)

(2) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC62321-3-1:2013 (unit:mg/kg)

| Element | Polymer Materials | Metal Materials | Composite Materials |
|---------|--|--|--|
| Cd | $BL \leq 70 - 3\sigma < X < 130 + 3\sigma \leq OL$ | $BL \leq 70 - 3\sigma < X < 130 + 3\sigma \leq OL$ | $BL \leq 50 - 3\sigma < X < 150 + 3\sigma \leq OL$ |
| Pb | $BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$ | $BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$ | $BL \leq 500 - 3\sigma < X < 1500 + 3\sigma \leq OL$ |
| Hg | $BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$ | $BL \leq 700 - 3\sigma < X < 1300 + 3\sigma \leq OL$ | $BL \leq 500 - 3\sigma < X < 1500 + 3\sigma \leq OL$ |
| Br | $BL \leq 300 - 3\sigma < X$ | ---- | $BL \leq 250 - 3\sigma < X$ |
| Cr | $BL \leq 700 - 3\sigma < X$ | $BL \leq 700 - 3\sigma < X$ | $BL \leq 500 - 3\sigma < X$ |

(a) BL=Below Limit, OL=Over Limit, X=Inconclusive, LOD=Limit of Detection, ----=Not regulated.

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

(3) Chemical Method

① With reference to IEC 62321-5:2013, determination of Cadmium, Lead by ICP-OES.

② With reference to IEC 62321-4:2013+AMD1:2017 CSV, determination of Mercury by ICP-OES.

③ With reference to IEC 62321-7-2:2017, determination of Hexavalent Chromium by UV-Vis.

④ With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.

⑤ With reference to IEC 62321-8:2017, determination of Phthalates by GC-MS.

(4) (a) mg/kg=0.0001%, MDL=MDL=Method Detection Limit, (c) ND=Not Detected (<MDL),

----=Not Regulated

(b) Unit and MDL in wet chemical test

| Test Item | Pb | Cd | Hg | DBP | BBP | DEHP | DIBP |
|-----------|-------|-------|-------|-------|-------|-------|-------|
| Unit | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| MDL | 10 | 10 | 10 | 100 | 100 | 100 | 100 |

The MDL for single compound of PBBs and PBDEs is 100 mg/kg

MDL of Cr(VI) for polymer and composite sample is 10 mg/kg

MDL of Cr(VI) for metal sample is 0.10ug/cm²

(c) ▼=Metal sample

a. The sample is negative for Cr⁶⁺ if Cr⁶⁺ is N.D. (below the limit 0.10ug/cm²). The coating is considered a non Cr⁶⁺ based coating.

b. The sample positive for Cr⁶⁺ if the Cr⁶⁺ concentration is greater than 0.13ug/cm². The sample coating is considered to contain Cr⁶⁺.

c. The result between 0.10ug/cm² and 0.13ug/cm² is considered to be inconclusive unavoidable coating variations may influence the determination.

**Tested Sample/Part Description:**

| Specimen No. | Component Description(s) | Style |
|--------------|----------------------------|-------|
| 01 | Silver metal | - |
| 02 | Black plastic | - |
| 03 | White silica gel | - |
| 04 | Grey silicone | - |
| 05 | Transparent glass | - |
| 06 | Silver metal screw | - |
| 07 | Black plastic | - |
| 08 | Brown plastic tape content | - |
| 09 | Black plastic | - |
| 10 | Black plastic | - |
| 11 | Silver metal | - |
| 12 | Black plastic triode | - |
| 13 | Black plastic IC | - |
| 14 | Black plastic IC | - |
| 15 | Silver solder | - |
| 16 | Green plastic PCB | - |
| 17 | Silver metal | - |
| 18 | White silica gel | - |
| 19 | White plastic | - |
| 20 | Silver metal pin | - |
| 21 | White rubber cover | - |
| 22 | White rubber leather | - |
| 23 | Pink rubber leather | - |
| 24 | Yellow metal conductor | - |
| 25 | White silica gel | - |
| 26 | Silver metal | - |

**Test Results:**

The results of XRF screening and chemical test (Unit: mg/kg)

| Part No. | Element | X-ray Screening | Results of chemical test | Conclusion on RoHS EU | Sample Resubmitted |
|----------|-----------------------|-----------------|--------------------------|-----------------------|--------------------|
| 01 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| 02 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 03 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 04 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 05 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 06 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| 07 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 08 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |



| Part No. | Element | X-ray Screening | Results of chemical test | Conclusion on RoHS EU | Sample Resubmitted |
|----------|-----------------------|-----------------|--------------------------|-----------------------|--------------------|
| 09 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 10 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 11 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| 12 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 13 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 14 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 15 | Pb | OL | N.D. | Pass | Jun.29,2022 |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| 16 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | OL | N.D. | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |



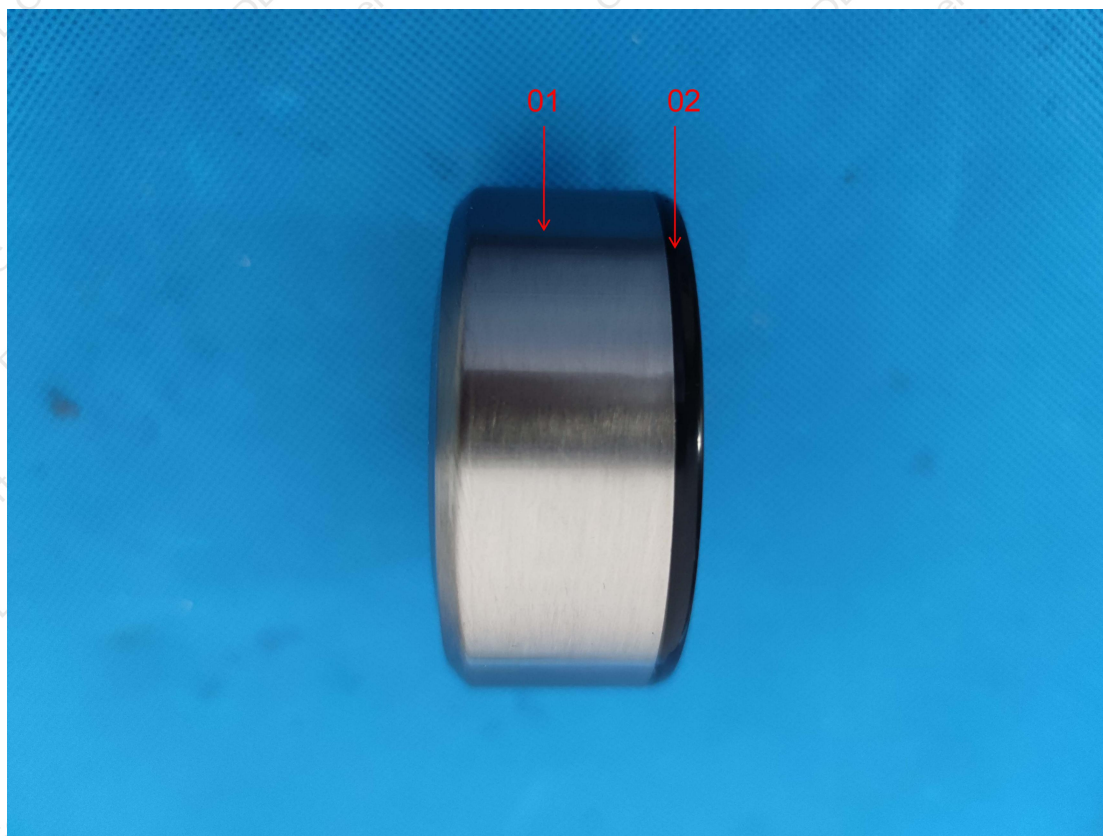
| Part No. | Element | X-ray Screening | Results of chemical test | Conclusion on RoHS EU | Sample Resubmitted |
|----------|-----------------------|-----------------|--------------------------|-----------------------|--------------------|
| 17 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| 18 | Pb | OL | N.D. | Pass | Jun.29,2022 |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 19 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 20 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | OL | N.D. | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| 21 | Pb | OL | N.D. | Pass | Jun.29,2022 |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 22 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 23 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 24 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |

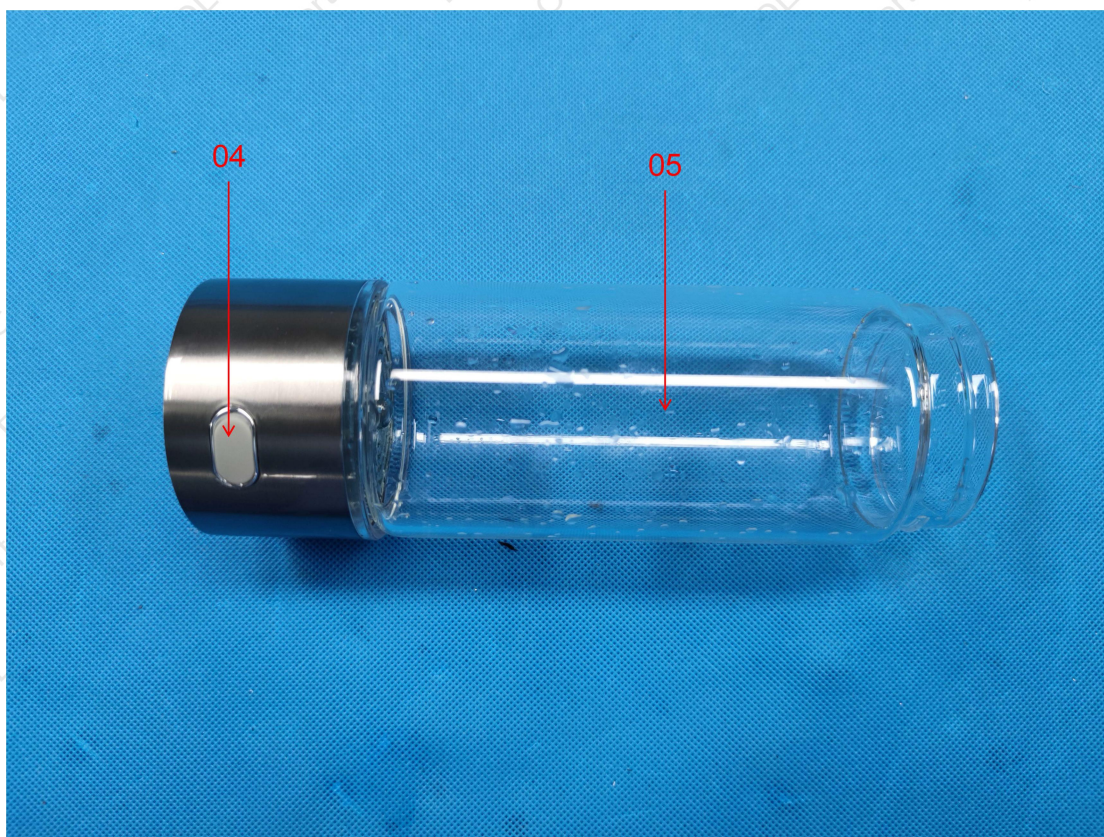
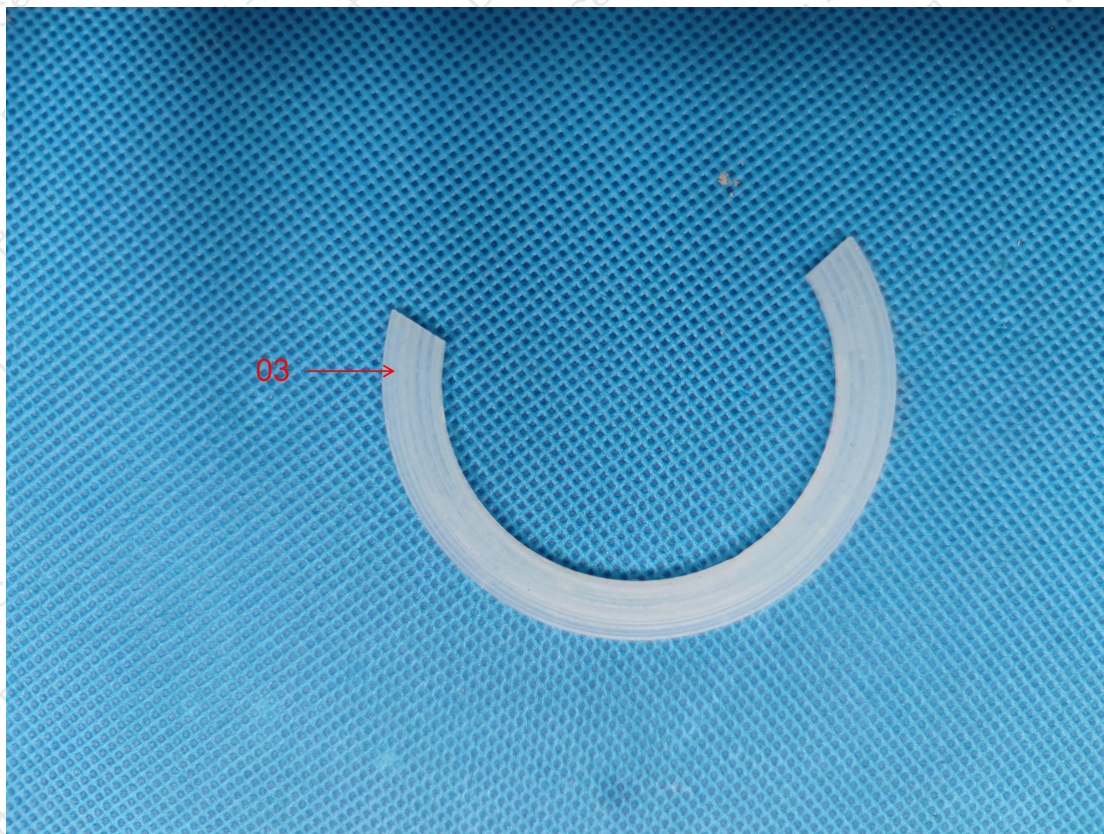


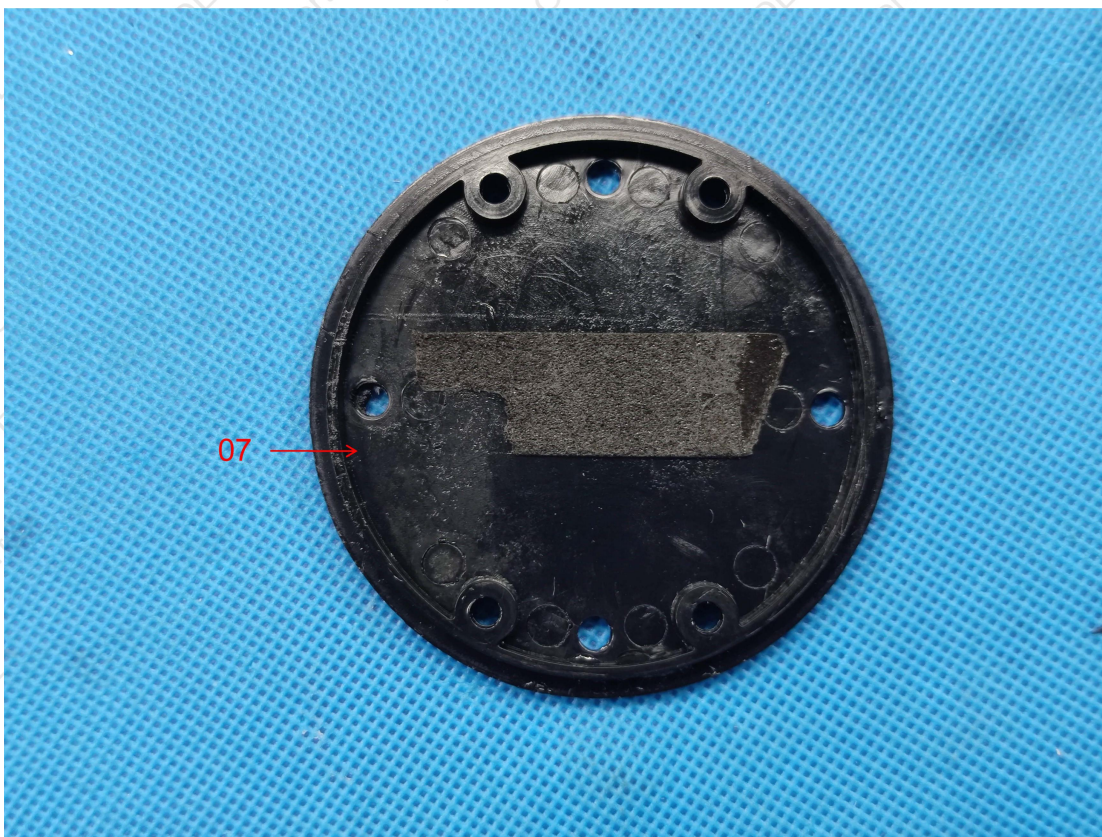
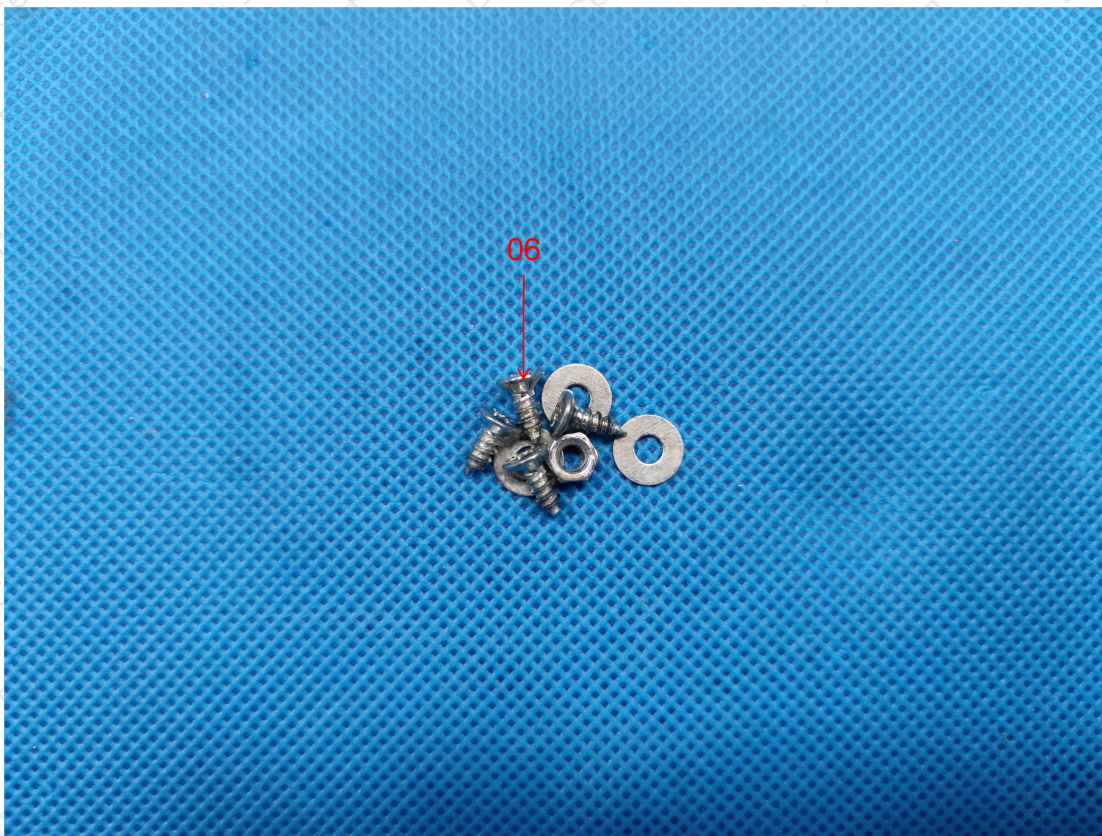
| Part No. | Element | X-ray Screening | Results of chemical test | Conclusion on RoHS EU | Sample Resubmitted |
|----------|-----------------------|-----------------|--------------------------|-----------------------|--------------------|
| 25 | Pb | OL | N.D. | Pass | Jun.29,2022 |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| 26 | Pb | OL | N.D. | Pass | Jun.29,2022 |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |

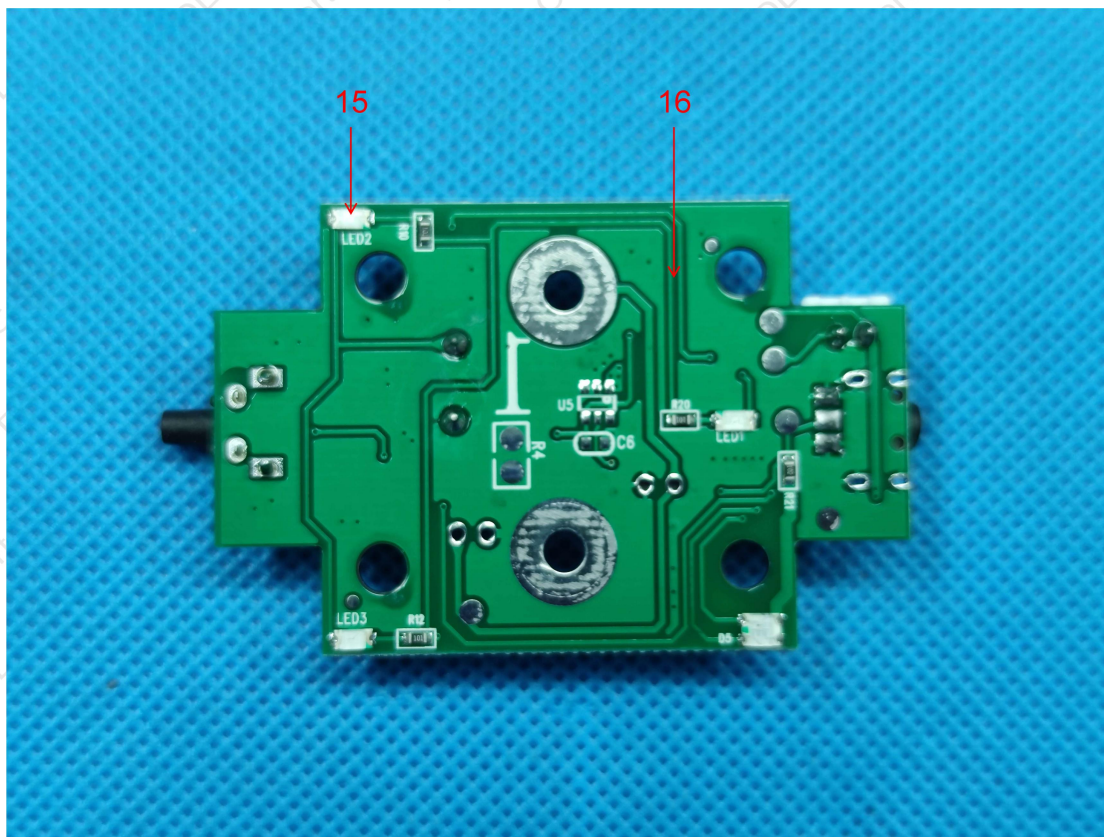
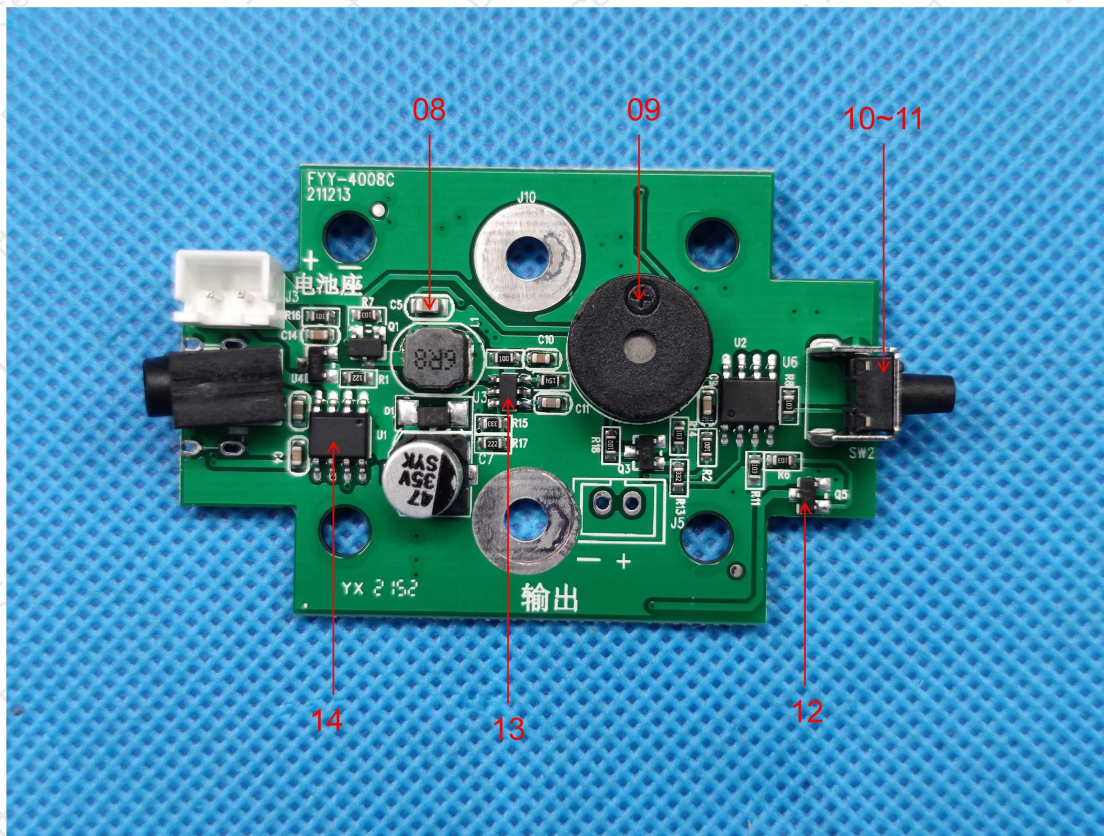


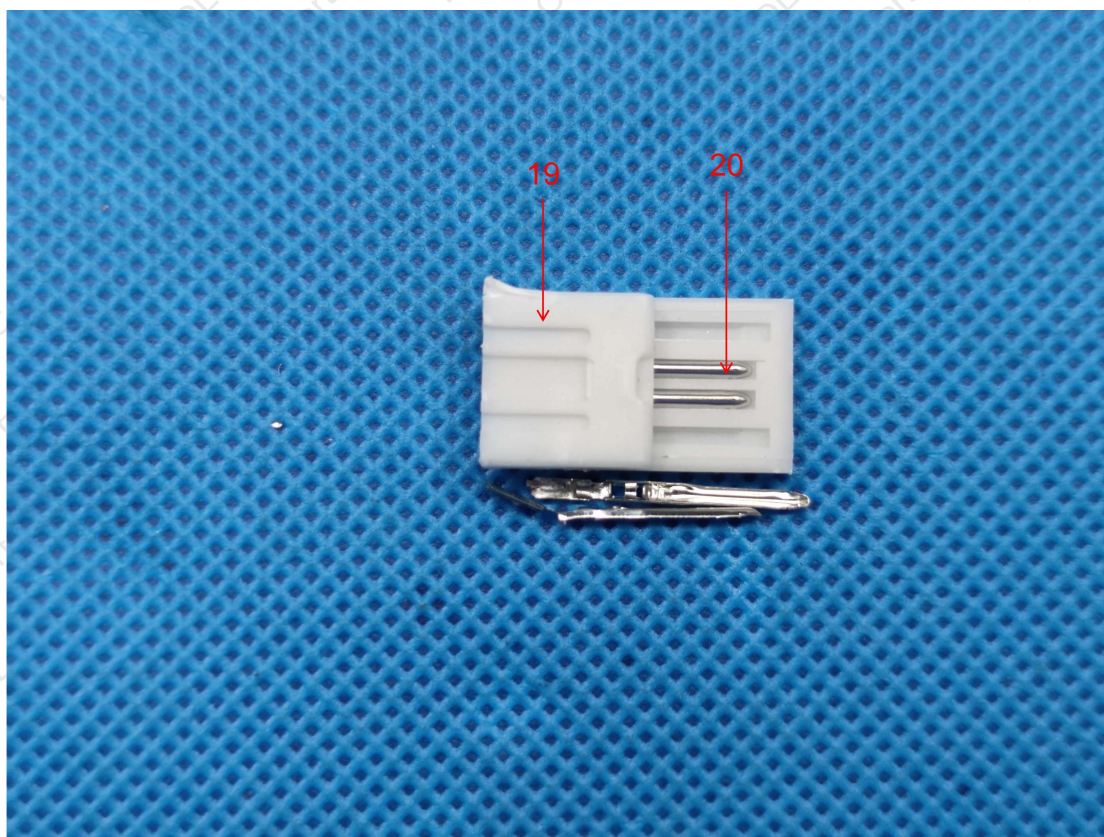
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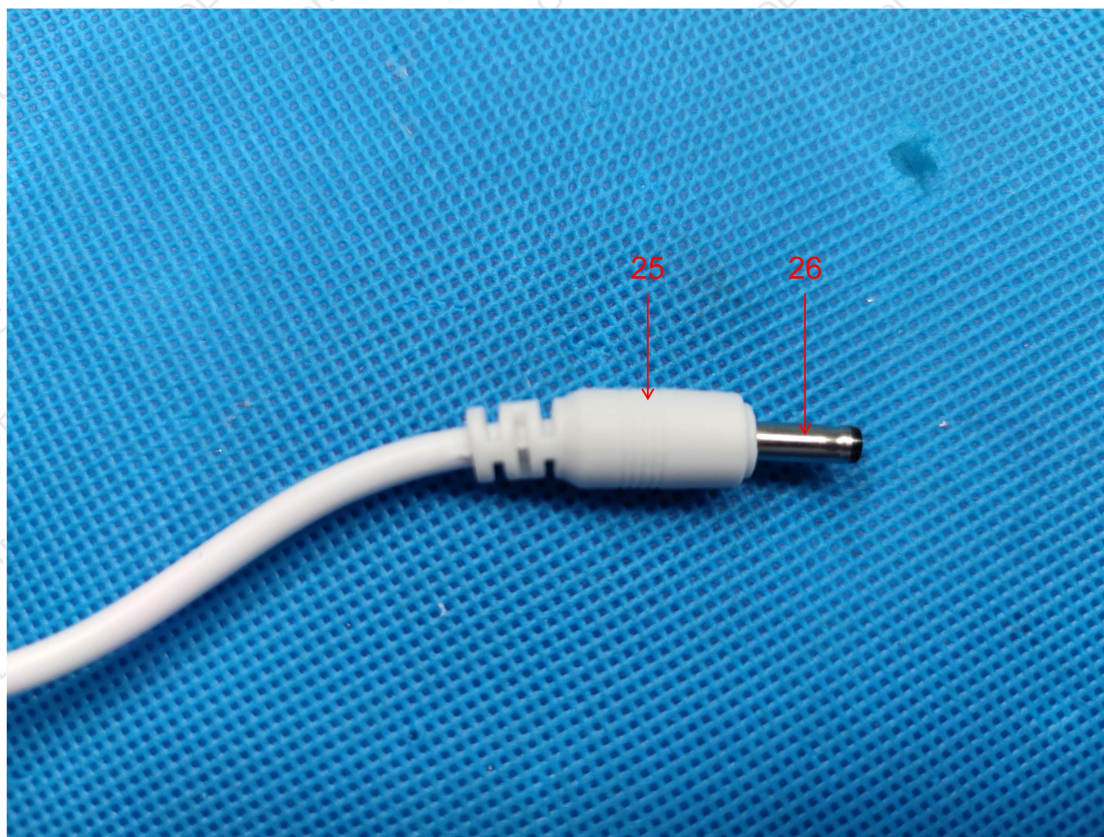
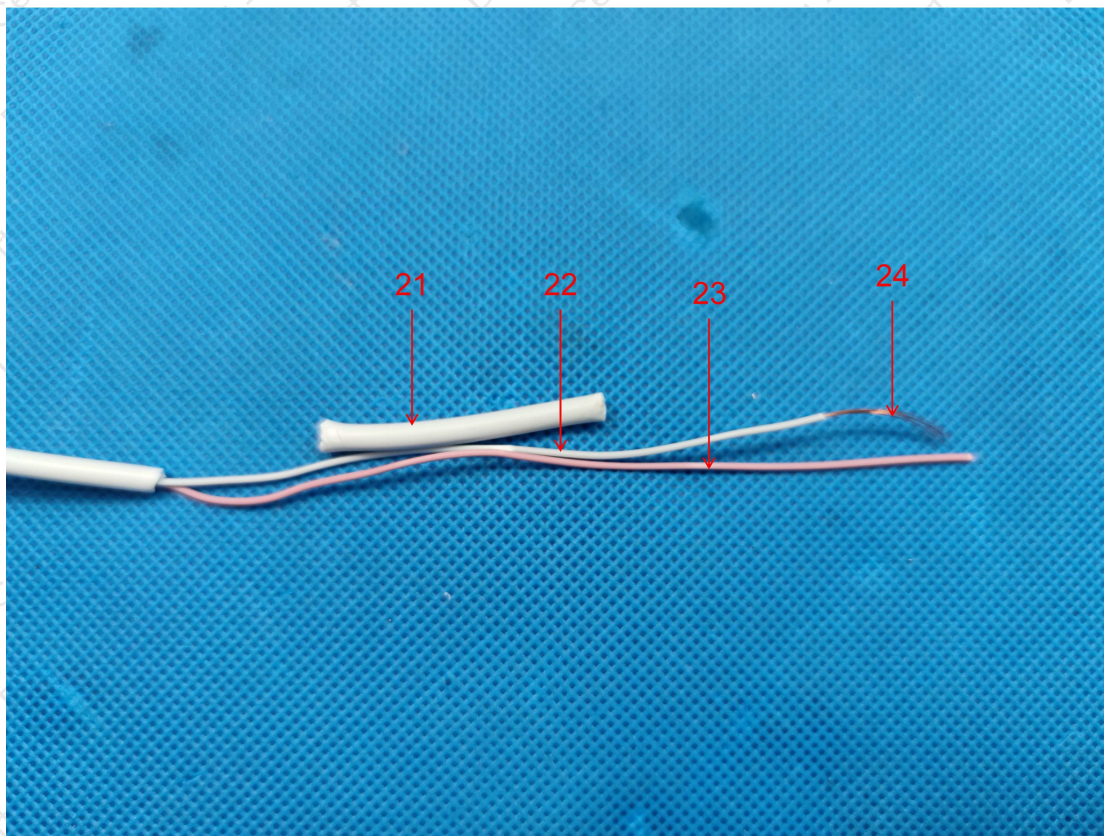












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