

# Test Report

No.: SZXEC23000164701

Date: Mar 03, 2023

Page 1 of 8

Client Name: SHENZHEN WORLD INDUSTRIAL CO.,LTD.

Client Address: ROOM 602, MAOYE CALLIGRAPHY AND PAINTING EXCHANGE SQUARE, NO.245  
BUSHA ROAD, LONGGANG DISTRICT, SHENZHEN

Sample Name: DO-27(DO-201AD)

Model No.: DO-27(DO-201AD)

Client Ref. Information: DO-15,DO-27(DO-201AD),TO-247-2,TO-220AC,TO-247,TO-247S,TO-252,TO-262,TO-3P,TO-220(ACT),TO-220F ITO-220AB ,TO-220AB,GBU,GBP,KBJ,GBJ,GBL,RBU,D3K,TO-251,DXB,DXT,KBP,KBPC,GBPC

The above sample(s) and information were provided by the client.

SGS Job No.: RP23-003818

Sample Receiving Date: Feb 28, 2023

Testing Period: Feb 28, 2023 - Mar 03, 2023

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  | Conclusion |
|---|------------|
| 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), Dibutyl phthalate (DBP), Butyl benzyl phthalate (BBP), Bis(2-ethylhexyl) phthalate (DEHP), and Diisobutyl phthalate (DIBP) | Pass       |
| EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium   | Pass       |

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Fay

Fay Yuan  
Approved Signatory

scan to see the report



6AF8B37F

# Test Report

No.: SZXEC23000164701

Date: Mar 03, 2023

Page 2 of 8

## Test Result(s):

### Test Part Description

| SN ID | Sample No. | SGS Sample ID           | Description                   |
|-------|------------|-------------------------|-------------------------------|
| SN1   | A1         | SZX23-0001647-0001.C001 | Black body with gray printing |
| SN2   | A2         | SZX23-0001647-0001.C002 | Silvery metal pin             |

### Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) -

**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), Dibutyl phthalate (DBP), Butyl benzyl phthalate (BBP), Bis(2-ethylhexyl) phthalate (DEHP), and Diisobutyl phthalate (DIBP)**

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES, UV-Vis and GC-MS.

| Test Item(s)                 | Limit | Unit(s) | MDL | A1   |
|------------------------------|-------|---------|-----|------|
| Cadmium(Cd)                  | 100   | mg/kg   | 2   | ND   |
| Lead (Pb)                    | 1000  | mg/kg   | 2   | 9378 |
| Mercury (Hg)                 | 1000  | mg/kg   | 2   | ND   |
| Hexavalent Chromium (Cr(VI)) | 1000  | mg/kg   | 8   | ND   |
| Polybromobiphenyl (PBBs)     | 1000  | mg/kg   | -   | ND   |
| MonoBromobiphenyl (MonoBB)   | -     | mg/kg   | 5   | ND   |
| Dibromobiphenyl (DiBB)       | -     | mg/kg   | 5   | ND   |
| Tribromobiphenyl (TriBB)     | -     | mg/kg   | 5   | ND   |
| Tetrabromobiphenyl (TetraBB) | -     | mg/kg   | 5   | ND   |
| Pentabromobiphenyl (PentaBB) | -     | mg/kg   | 5   | ND   |
| Hexabromobiphenyl (HexaBB)   | -     | mg/kg   | 5   | ND   |

# Test Report

No.: SZXEC23000164701

Date: Mar 03, 2023

Page 3 of 8

| Test Item(s)                       | Limit | Unit(s) | MDL | A1 |
|------------------------------------|-------|---------|-----|----|
| Benzyl Butyl Phthalate(BBP)        | 1000  | mg/kg   | 50  | ND |
| Bis-(2-ethylhexyl) Phthalate(DEHP) | 1000  | mg/kg   | 50  | ND |
| Diisobutyl Phthalate(DIBP)         | 1000  | mg/kg   | 50  | ND |

## Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

## EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium

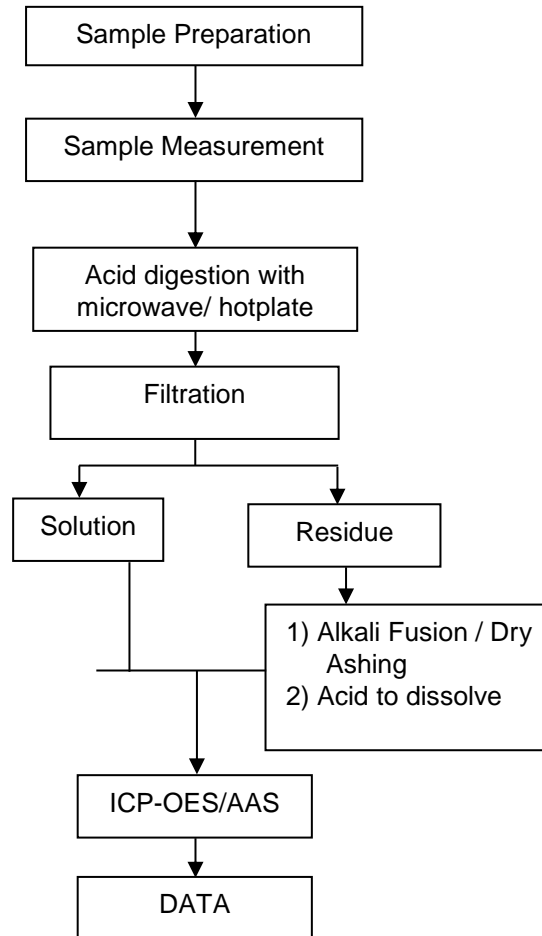
Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013 and IEC 62321-7-1:2015, analysis was performed by ICP-OES and UV-Vis .

| Test Item(s) | Limit | Unit(s)            | MDL  | A2 |
|--------------|-------|--------------------|------|----|
| Cadmium(Cd)  | 100   | mg/kg              | 2    | ND |
| Lead(Pb)     | 1000  | mg/kg              | 2    | ND |
| Mercury(Hg)  | 1000  | mg/kg              | 2    | ND |
|              | -     | µg/cm <sup>2</sup> | 0.10 | ND |

## Notes:

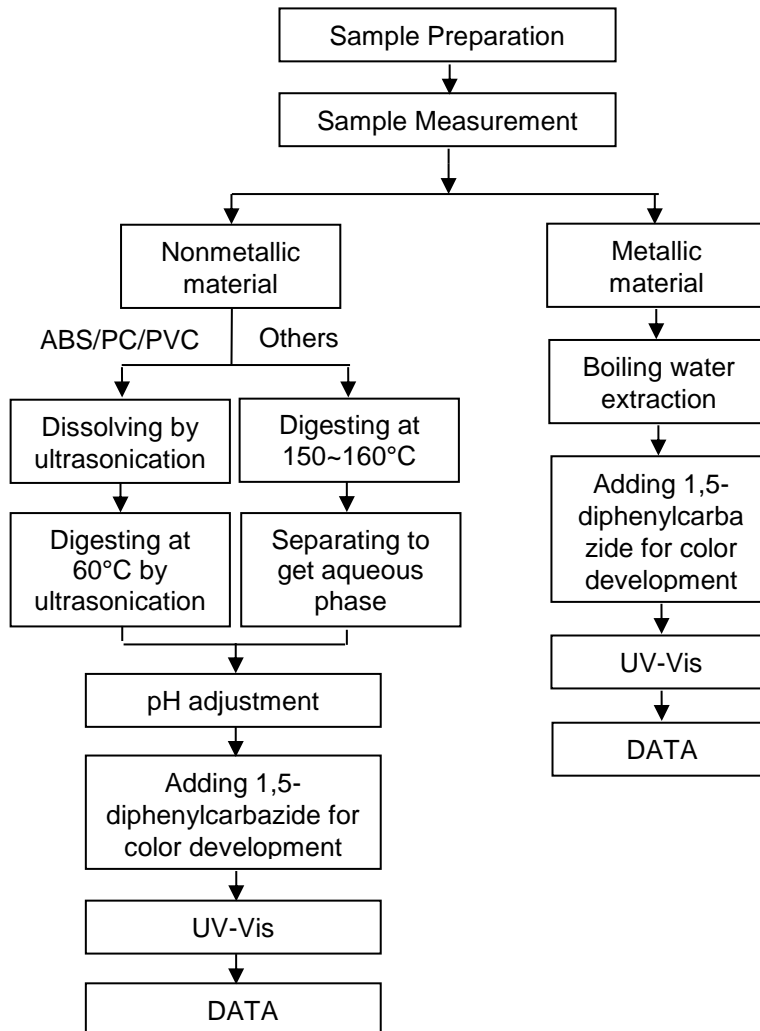
**Elements (IEC62321) Testing Flow Chart**

These samples were dissolved totally by pre-conditioning method according to below flow chart.



ATTACHMENTS

Hexavalent Chromium (Cr(VI)) Testing Flow Chart



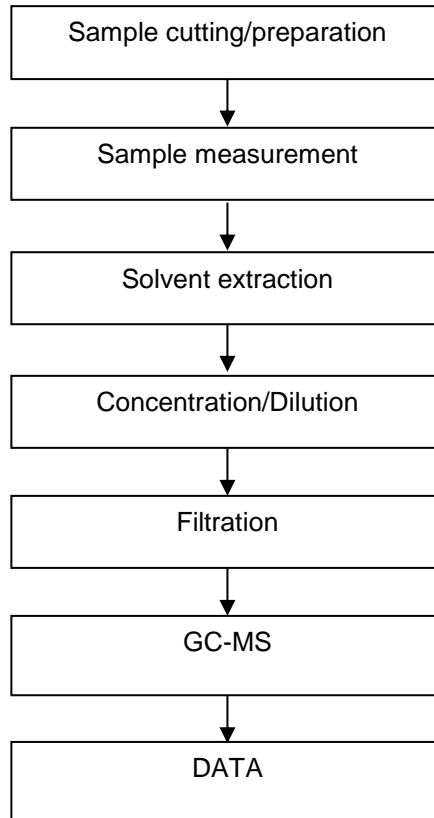
**Test Report**  
AT

**No.:** SZXEC23000164701

**Date:** Mar 03, 2023

Page 6 of 8

**Phthalates Testing Flow Chart**



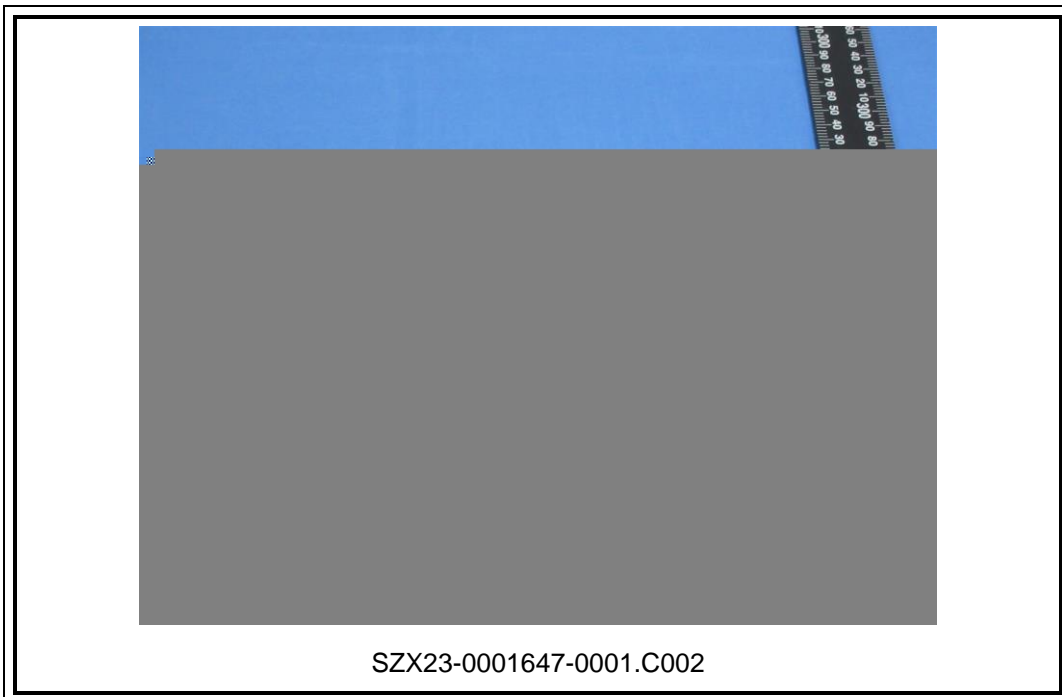
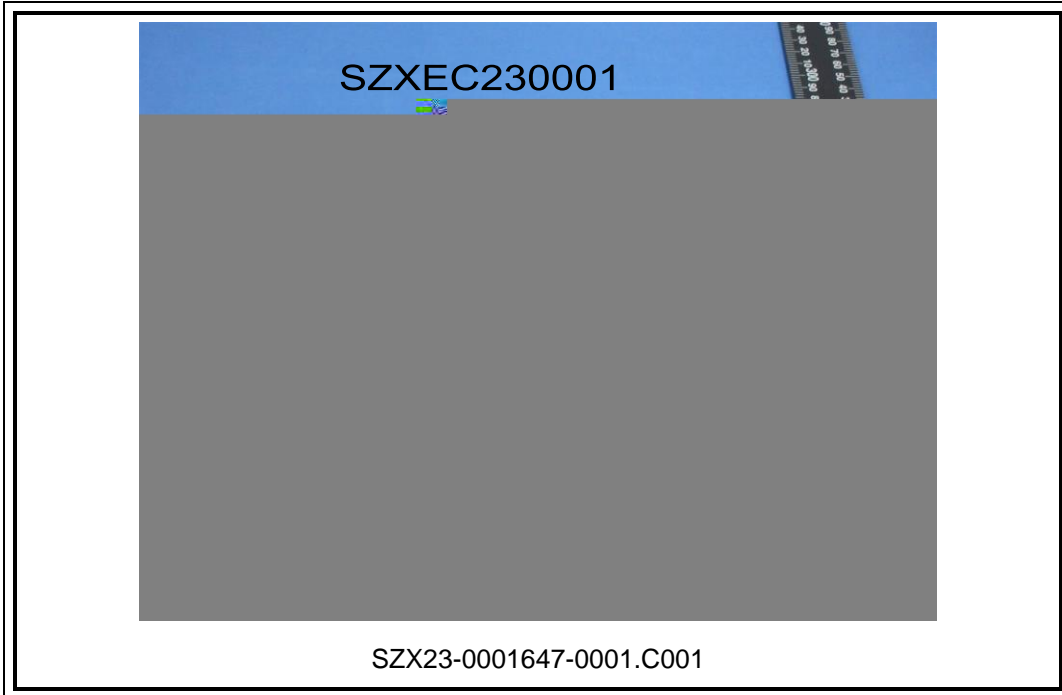
**Test Report**

**No.:** SZXEC23000164701

**Date:** Mar 03, 2023

Page 8 of 8

**Sample Photo:**



SGS authenticate the photo on original report only  
\*\*\* End of Report \*\*\*