**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	Pass
(DBP), Butyl benzyl phthalate (BBP), Bis(2-ethylhexyl) phthalate (DEHP), and	
Diisobutyl phthalate (DIBP)	
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive	Pass
2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium	1 433

Signed for and on behalf of

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Fay Yuan

Approved Signatory



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#### 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

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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/cm²	0.10	ND

Notes:			

**ATTACHMENTS** 

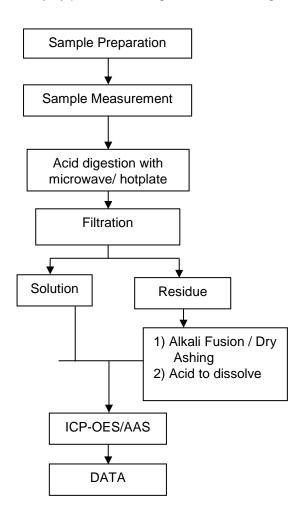
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## Elements (IEC62321) Testing Flow Chart

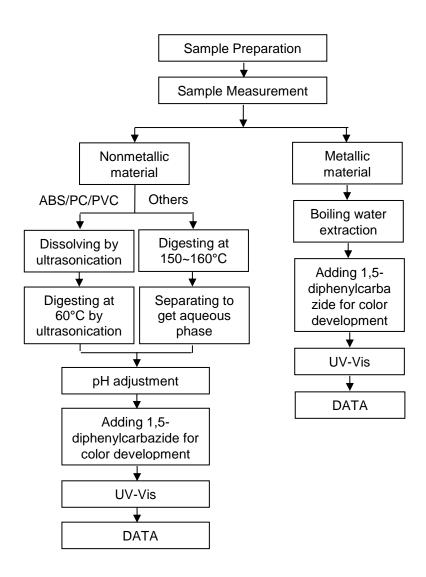
These samples were dissolved totally by pre-conditioning method according to below flow chart.



## **ATTACHMENTS**

## Hexavalent Chromium (Cr(VI)) Testing Flow Chart

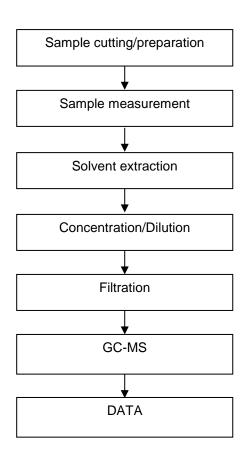
**Date:** Mar 03, 2023



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ATDate:

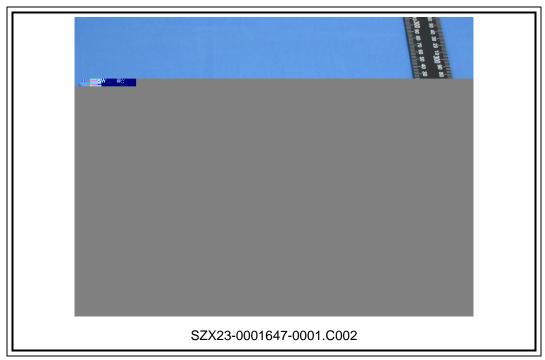
## **Phthalates Testing Flow Chart**



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Sample Photo:





SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*