



# Test Report

<b>Applicant name:</b>	Shenzhen TwoTrees Technology Co., Ltd.
<b>Applicant address:</b>	Room 402, Building 11, No.9 Qilin Road, Nankeng Community Bantian Street, Longgang District, Shenzhen, Guangdong, China, 518000

## Sample information:

<b>Sample Name:</b>	LASER ENGRAVER
<b>Sample Model:</b>	TTS, TT, TTS-25, TTS-35, TTS-50, TTS-55
<b>Trade mark :</b>	N/A
<b>Manufacturer:</b>	Shenzhen TwoTrees Technology Co., Ltd. Room 402, Building 11, No.9 Qilin Road, Nankeng Community Bantian Street, Longgang District, Shenzhen, Guangdong, China, 518000
<b>Sample Received Date:</b>	Oct.27,2021
<b>Testing Period:</b>	Oct.27,2021~Nov.02,2021

**Test Requested** As specified by client, to determine the Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, DEHP, BBP, DBP & DIBP content in the submitted sample compliance with RoHS directive 2011/65/EU Annex II amending Annex (EU)2015/863 and amending Annex (EU)2017/2102.

## Test Method:

Tested Item(s)	Test Method	Measured Equipment(s)	MDL
Lead(Pb)	IEC 62321-5:2013	ICP-OES	2mg/kg
Cadmium(Cd)	IEC 62321-5:2013	ICP-OES	2mg/kg
Mercury(Hg)	IEC 62321-4:2013+A1:2017	ICP-OES	2mg/kg
Hexavalent Chromium(Cr(VI))	IEC 62321-7-1:2015 IEC 62321-7-2:2017	UV-VIS	2mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	5mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS	5mg/kg
Di-(2-ethylhexyl) phthalate(DEHP)	IEC 62321-8:2017	GC-MS	50mg/kg
Benzylbutyl phthalate(BBP)	IEC 62321-8:2017	GC-MS	50mg/kg
Dibutyl phthalate (DBP)	IEC 62321-8:2017	GC-MS	50mg/kg
Diisobutyl phthalate(DIBP)	IEC 62321-8:2017	GC-MS	50mg/kg

**Test Result(s)** Please refer to the following page(s).

Test by : Heber He

Inspected by : Mary 2021

Approved by : Kevin Yang  
Technical Manager

Date : Nov.02,2021





# Test Report

## Test Result:

No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
01	Engraving machine laser module	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
02	42 stepper motor	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
03	Main board	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
04	USB extension cable	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



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No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
05	TF Card 4GB	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
06	TF card reader	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
07	Laser protective glasses	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
08	Motor line	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



# Test Report

No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
09	Black cable	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
10	Motherboard shell	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
11	Z-axis guide rail seat	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
12	Sliding support	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



# Test Report

No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
13	Laser head support	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
14	Bellows X-axis fixing seat	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
15	Bellows holder	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
16	Y-axis frame profile	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	-
		PBDEs	1000	-
		DEHP	1000	-
		BBP	1000	-
		DBP	1000	-
		DIBP	1000	-



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No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
17	Y-axis frame profile side	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
18	X-guide common rail profile	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
19	Front baffle	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
20	Rear baffle	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



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No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
21	Idler gear holder	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
22	POM wheel	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
23	20 tooth synchronous wheel	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
24	20 tooth idler	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



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No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
25	Linear guide rail	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
26	Stainless steel screw rod	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	-
		PBDEs	1000	-
		DEHP	1000	-
		BBP	1000	-
		DBP	1000	-
		DIBP	1000	-
27	Hand tighten knurled nut	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
28	Optical axis limit ring	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.





# Test Report

No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
29	Nylon isolation column	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
30	POM steel washer	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
31	Pressed single hole nut	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
32	Rubber head screw	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



# Test Report

No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
33	Eccentric nut	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	-
		PBDEs	1000	-
		DEHP	1000	-
		BBP	1000	-
		DBP	1000	-
		DIBP	1000	-
34	Isolation column	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
35	Brass gasket	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	-
		PBDEs	1000	-
		DEHP	1000	-
		BBP	1000	-
		DBP	1000	-
		DIBP	1000	-
36	Self locking nut	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



# Test Report

No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
37	T-nut	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
38	Socket head cap screw	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
39	Extension wrench	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
40	Nylon gasket	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.



# Test Report

No.	Part Name	Restricted Substances	Limit (mg/kg)	Test Results
41	Closed synchronous belt	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
42	Rubber timing belt	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.
43	T- rubber foot pad	Pb	1000	N.D.
		Cd	100	N.D.
		Hg	1000	N.D.
		Cr <sup>6+</sup>	1000	N.D.
		PBBs	1000	N.D.
		PBDEs	1000	N.D.
		DEHP	1000	N.D.
		BBP	1000	N.D.
		DBP	1000	N.D.
		DIBP	1000	N.D.

Note:

N.D. =Not Detected(<MDL)

mg/kg = ppm =parts per million

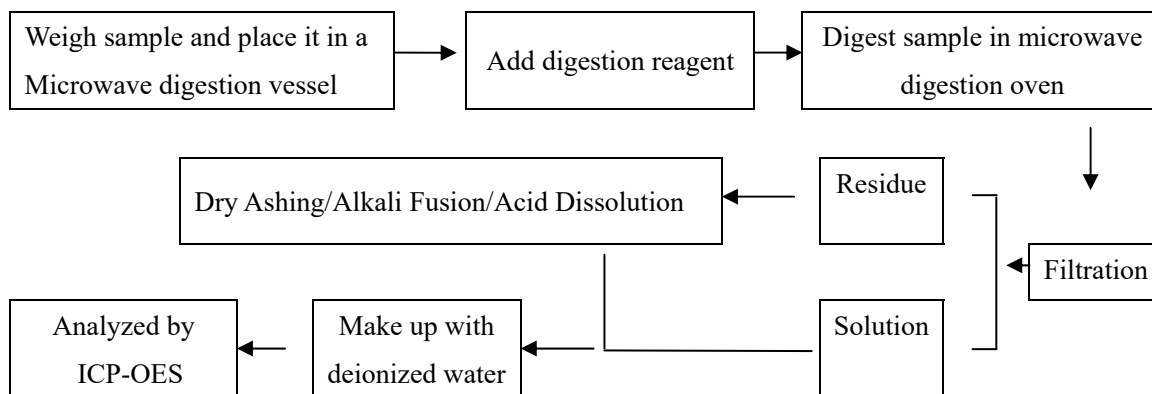
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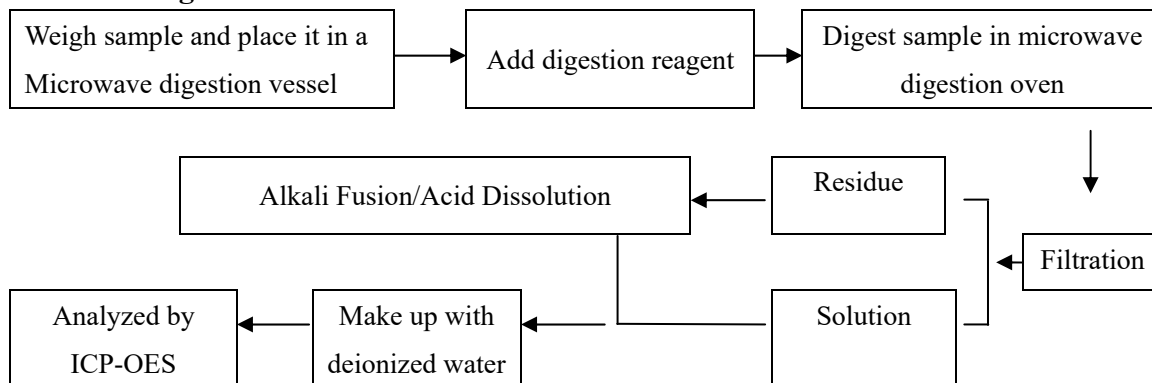
# Test Report

## Test process

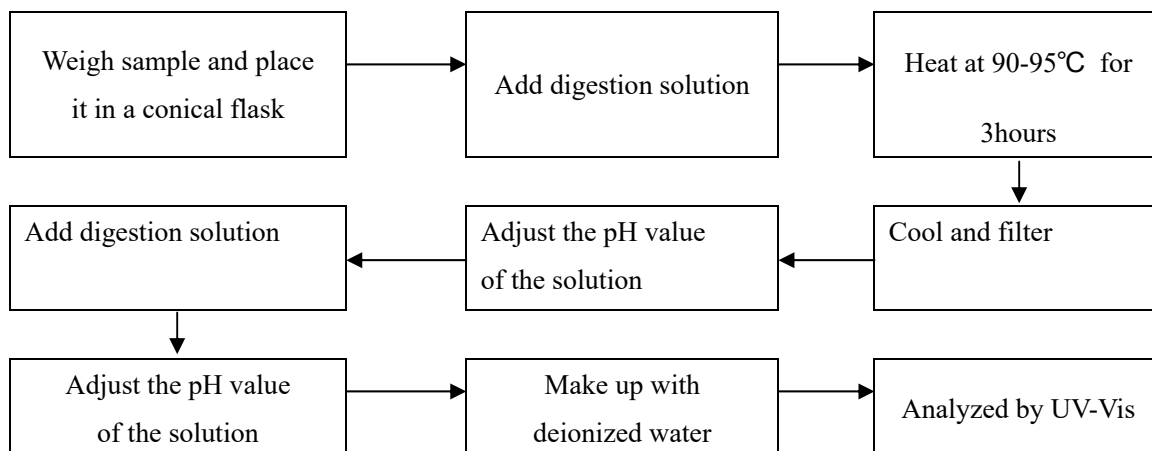
### 1. Test for Pb/Cd Content



### 2. Test for Hg Content



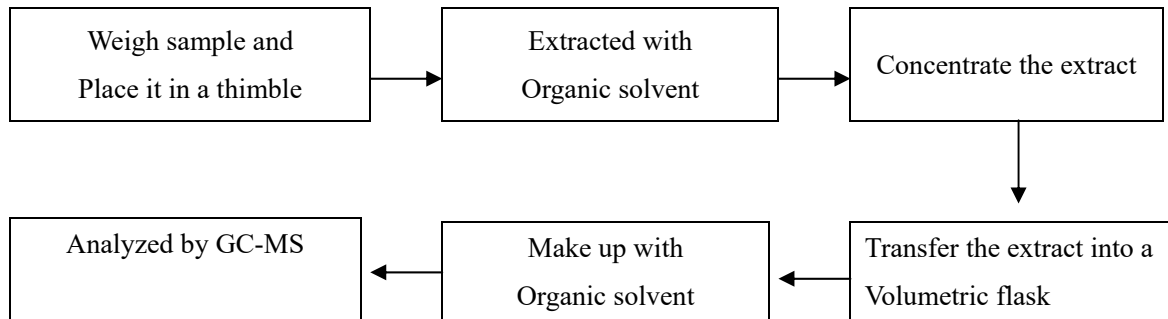
### 3. Test for Chromium (VI) Content



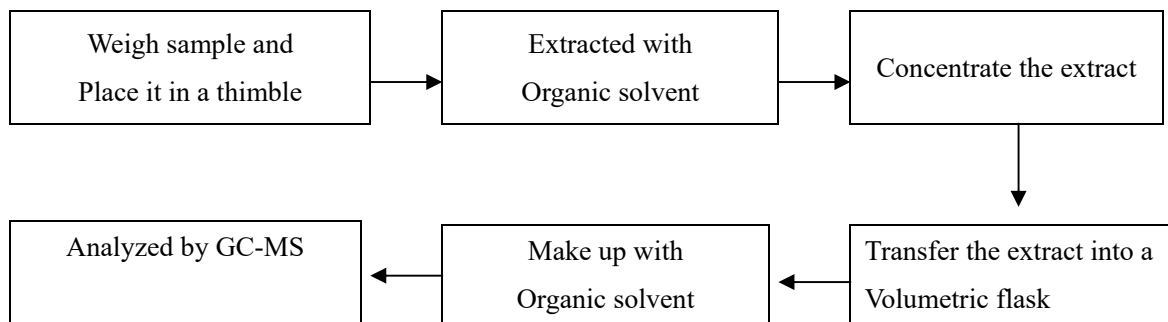


# Test Report

## 4. Test for PBBs/PBDEs Content



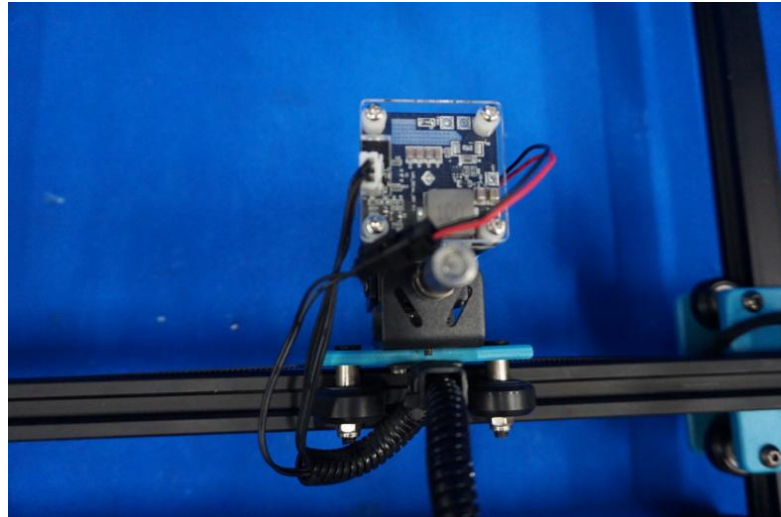
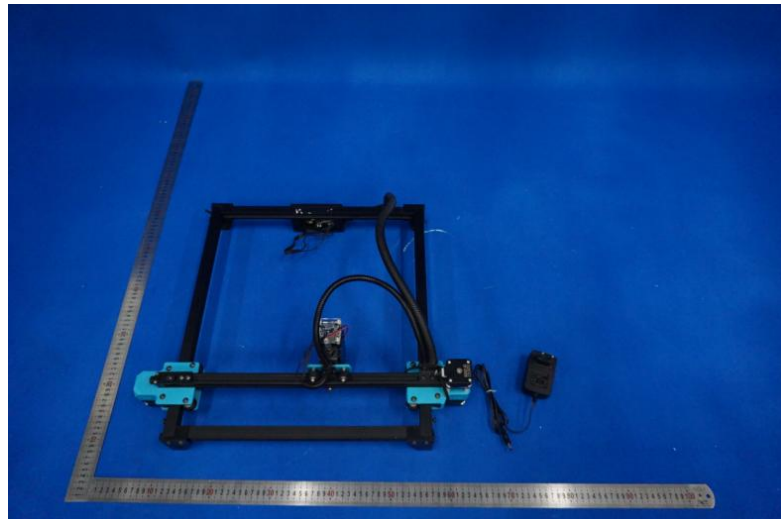
## 5. Phthalates Content





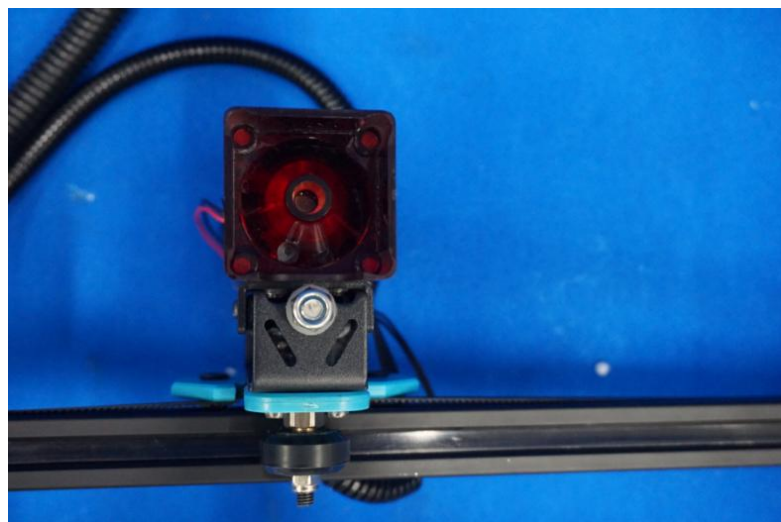
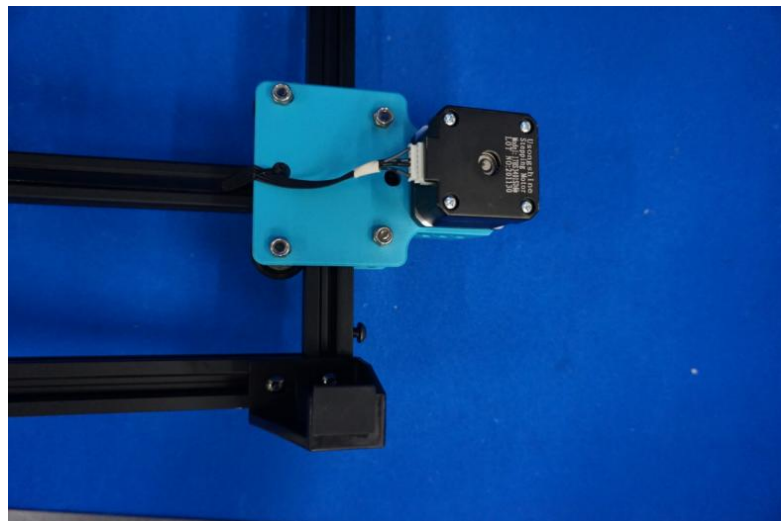
# Test Report

Photo(s) of the sample(s)





# Test Report



\*\*\* End of report \*\*\*

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