

Applicant Shanghai San-Xin Instrumentation, INC.
Address 4F, Building No.16, Guiping Road, Shanghai China
Name and address of Manufacturer: Shanghai San-Xin Instrumentation, INC.
4F, Building No.16, Guiping Road, Shanghai China
The following sample(s) was /were submitted and identified on behalf of the clients as :
Sample Name: pH/Conductivity Tester
Model Name: GS1, GS2, GS3, GS4, GS5, GS6, GS7, GS8, GS9, GS10
Product trademark: APERA
Sample Received Date: December 22, 2020
Testing Period: December 24, 2020-December 28, 2020
Declaration issue date: December 29, 2020
Test Requested: Selected test (s) in the selected parts as requested by client with the RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU
Test Method Please refer to next page(s).
Test Result Please refer to next page(s).
Test conclusion: Based upon the performed tests by submitted samples, the test results comply with the limits of the RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU

Signed for and on behalf of



The seal is circular with a blue border. Inside, there is a smaller blue circle with the TMC logo and the text 'TMC access to global market'. Below this, it says 'Product Safety'. The seal is signed with a blue ink signature.

Technical Director

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Sample No.	Component s	Test Item(s)	Unit	Test Method (Reference)	Result	MD L	Limit
01	Shell material	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	18.96	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	7.74	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-1:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
02	PCB printed circuit board	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	33.65	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	17.24	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-2:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000

Sample No.	Components	Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
03	PPTransparent lid	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	N.D.	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	N.D.	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-2:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
04	Sling	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	3.06	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	2.88	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-2:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000

Sample No.	Components	Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
05	Electronic components	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	17.22	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	21.96	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-2:2017, UV-Vis	5.03	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
06	Battery	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	N.D.	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	N.D.	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-2:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000

Sample No.	Components	Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
07	Trademark nameplate	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	16.88	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	N.D.	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-2:2017, UV-Vis	222.14	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
08	Display module	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	8.06	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	N.D.	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrVI)	mg/kg	IEC62321-7-2:2017, UV-Vis	11.47	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate (DIBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000

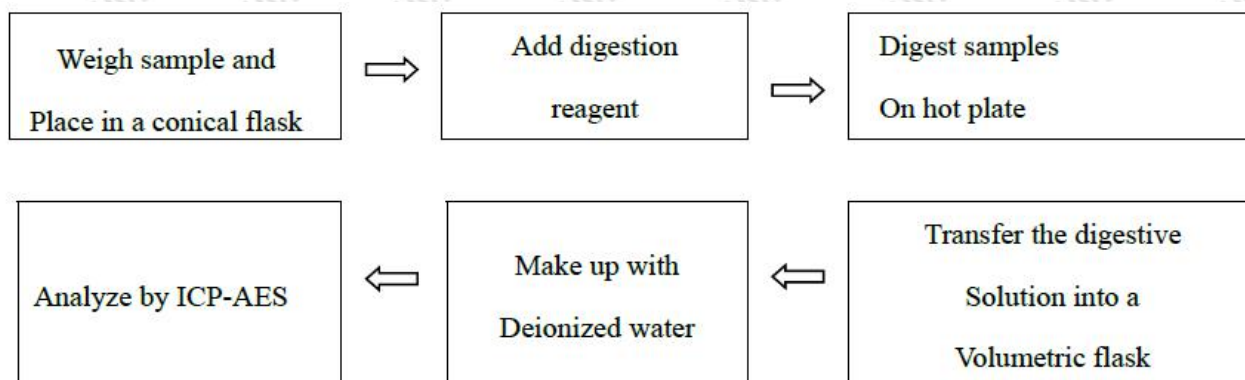
Sample No.	Components	Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
09	Key switch	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	16.62	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	9.05	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrV)	mg/kg	IEC62321-7-2:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
10	Soldering tin	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	16.69	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	117.12	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrV)	mg/kg	IEC62321-7-1:2017, UV-Vis	253.6	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	--	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	--	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	--	30	1000
		Di-(2-ethylhexyl)	mg/kg	IEC62321-8:2017, GC-MS	--	30	1000
		Diisobutyl phthalate	mg/kg	IEC62321-8:2017, GC-MS	--	30	1000

Sample No.	Components	Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
11	PH4.0 solution	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	N.D.	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	N.D.	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrV)	mg/kg	IEC62321-7-2:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
12	PH7.0 solution	Cadmium(Cd)	mg/kg	IEC62321-5:2013, ICP-AES	N.D.	2	100
		Lead(Pb)	mg/kg	IEC62321-5:2013 ICP-AES	N.D.	2	1000
		Mercury(Hg)	mg/kg	IEC62321-4:2017, ICP-AES	N.D.	2	1000
		Hexavalent Chromium(CrV)	mg/kg	IEC62321-7-2:2017, UV-Vis	N.D.	2	1000
		Sum of PBBs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Sum of PBDEs	mg/kg	IEC62321-6:2015, GC-MS	N.D.	--	1000
		Dibutyl Phthalate(DBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Benzylbutyl Phthalate (BBP)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Di-(2-ethylhexyl)	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000
		Diisobutyl phthalate	mg/kg	IEC62321-8:2017, GC-MS	N.D.	30	1000

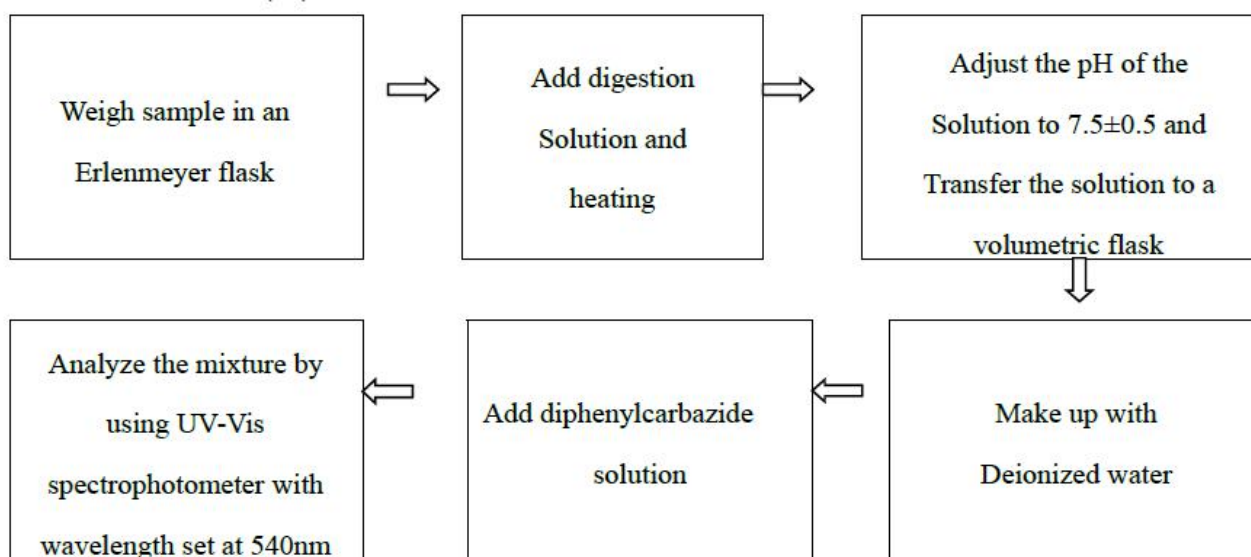
- Note:**
1. mg/kg= ppm
 2. N.D. = No Detection (<MDL)
 3. MDL = Method Detection Limit
 4. -- = No Testing

Test Process:

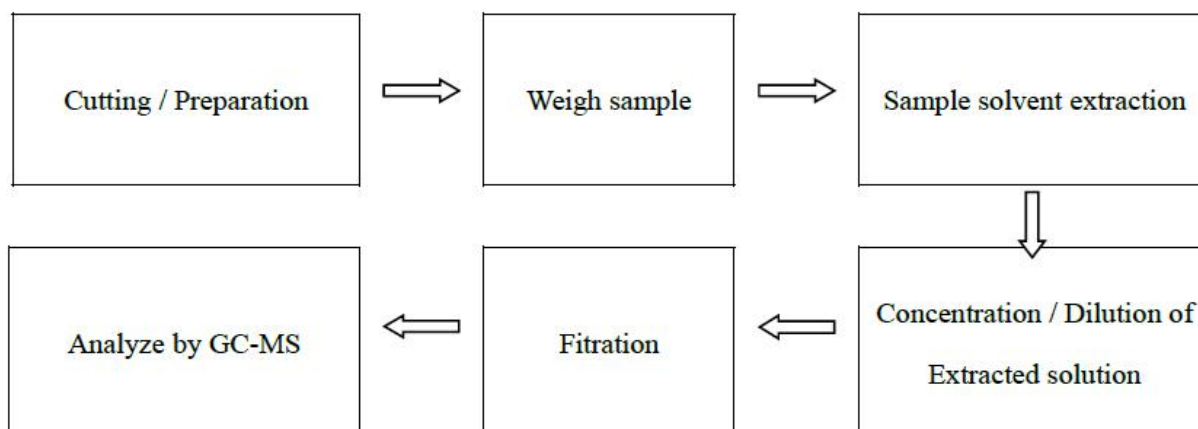
1. Test for Cd/Pb /Hg



2. Test for Chromium (VI) Content



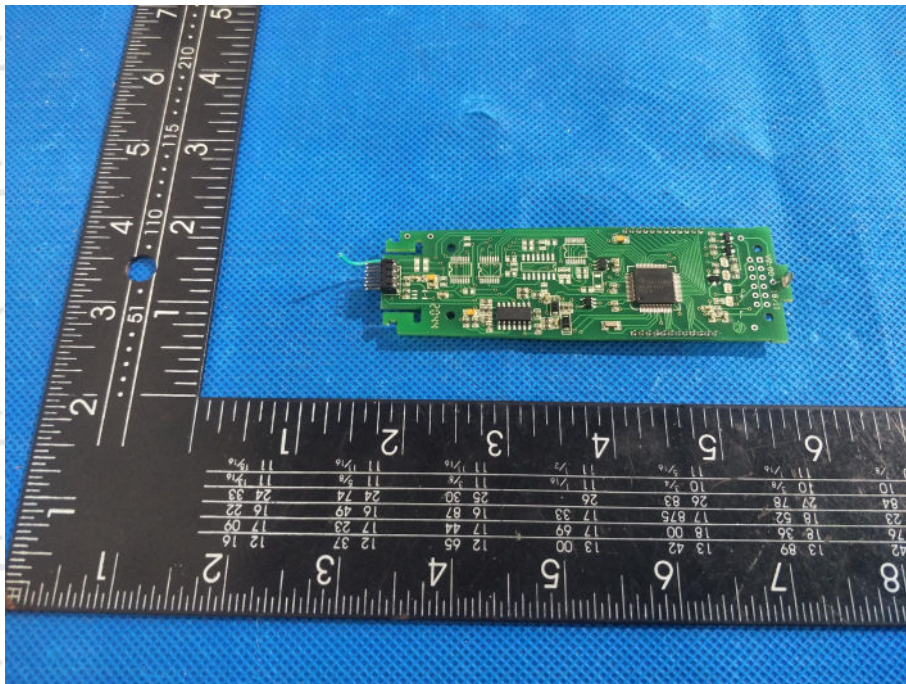
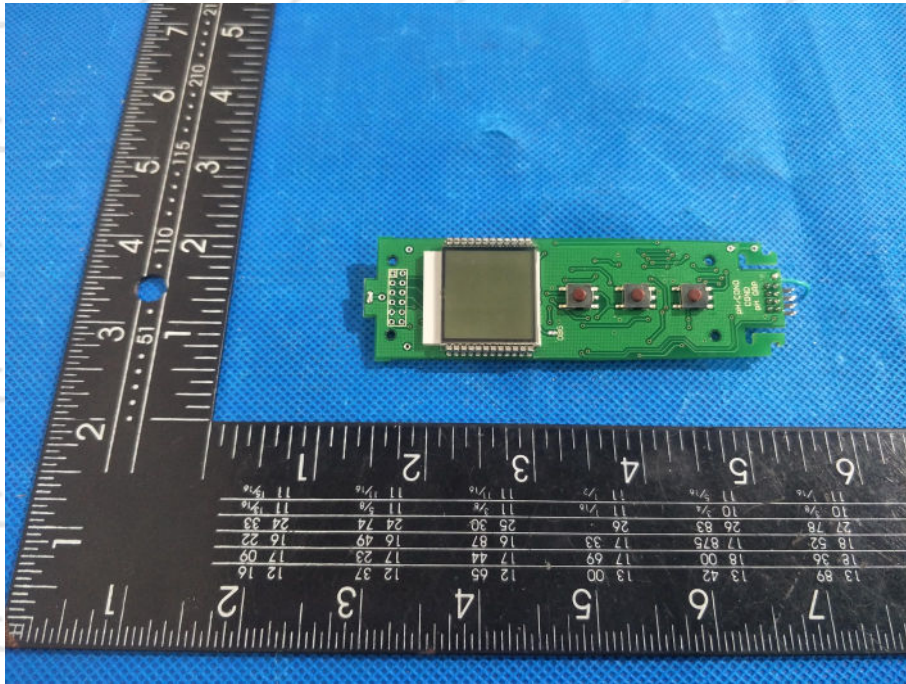
3. Test for PBBs/PBDES/DIBP/DBP/BBP/DEHP Content

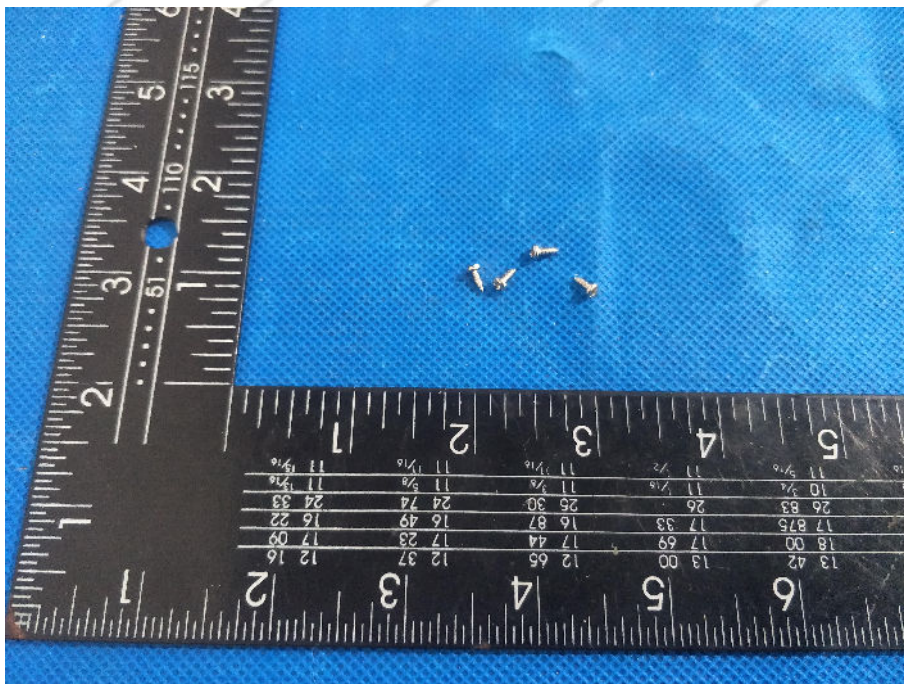


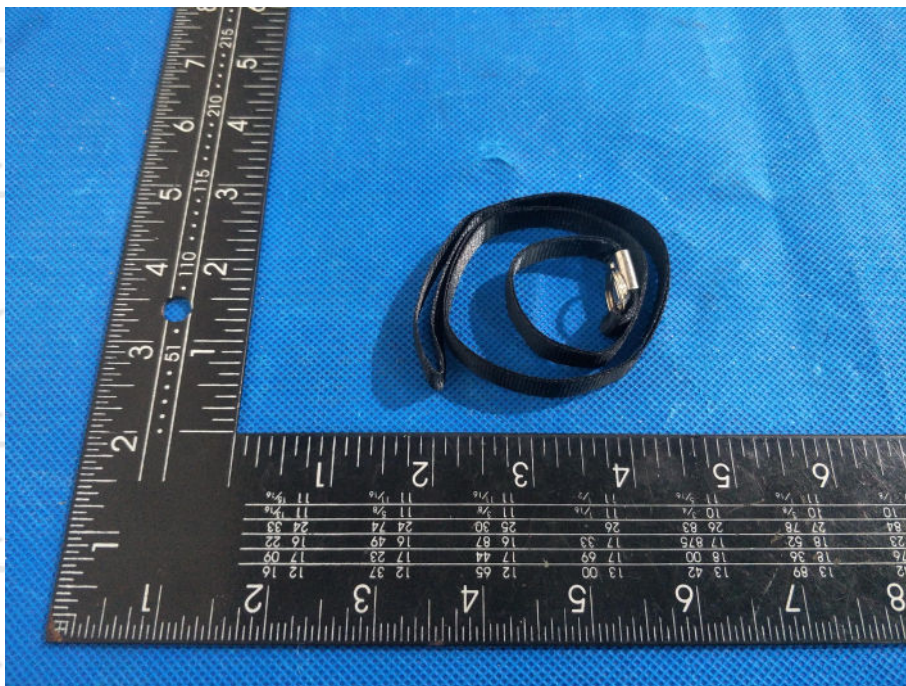
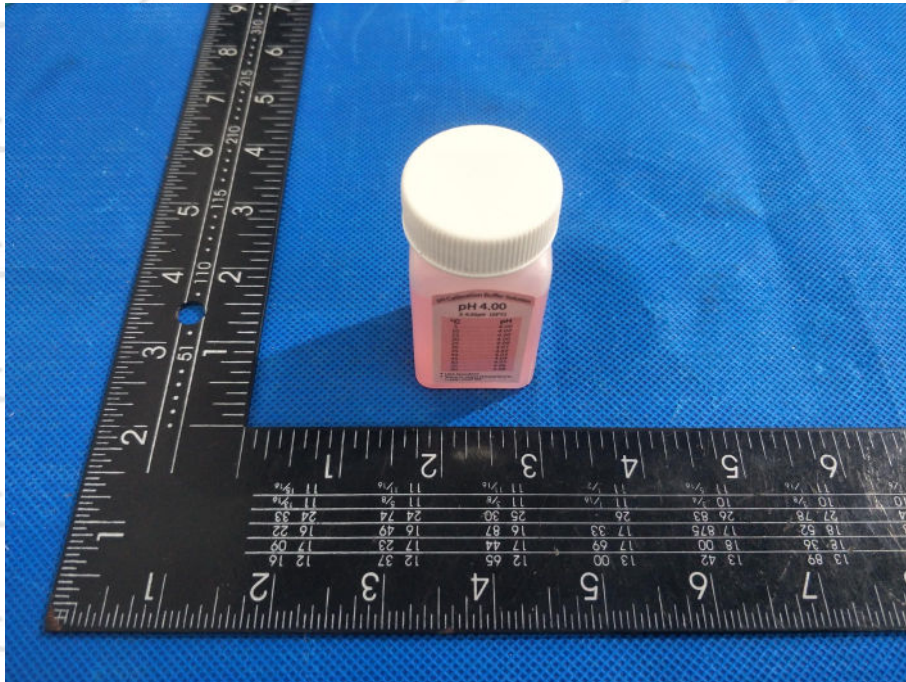
Sample photo:











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