



ROHS REPORT

Applicant: DONG GUAN CITY LANG CHEN TECHNOLOGY CO., LTD
Address: 704 Room, No. 7 East 2nd Street, Xingfa South Road, Wusha, Chang An Town
Dongguan
Manufacturer: DONG GUAN CITY LANG CHEN TECHNOLOGY CO., LTD
Address: 704 Room, No. 7 East 2nd Street, Xingfa South Road, Wusha, Chang An Town
Dongguan

The following sample(s) was /were submitted and identified on behalf of the clients as:

Sample name: Smart Watch
Model: L61plus, L62, X7, T500, T55, T500PLUS, L157, L17, L63, L65, L66, L67, L68
Trade Name: N/A
Sample Received Date: Apr.15,2021
Testing Period: Apr.15,2021- Apr.20,2021
Test Requested: As specified by client, according to rohs Directive 2011/65/EU with amendent(EU) 2015/863 to test lead(pb), cadmium(Cd),Mercury(Hg),Hexavalent Chromium(Cr/VI), Polybrominated biphenyls(PBBs) Polyborominate Diphenyl Ethers(PBDEs),Phthalates(DBP, BBP,DEHP,DIBP) in the test materials of the submitted sample(s).

Test Method: Please refer to next page(s).

Test Result: Please refer to next page(s).

Signed for and on behalf of




Steven/ Approved Signatory

Test Method

(1) XRF screening limits for regulated elements according to IEC 62321-3-1:2013(Unit:mg/kg)

Element	Polymers	Metals	Composite material
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$
Br	$BL \leq (300-3\sigma) < X$	N/A	$BL \leq (250-3\sigma) < X$

(2) Chemical screening limits for Phthalates

Test Item(s)	Screening limits(Unit:mg/kg)
Dibutyl Phthalate(DBP)	$BL \leq 600 < IN$
Benzylbutyl Phthalate(BBP)	$BL \leq 600 < IN$
Di-2-ethylhexyl Phthalate(DEHP)	$BL \leq 600 < IN$
Diisobutyl Phthalate(DIBP)	$BL \leq 600 < IN$

(3)Chemical Test

Test Item(s)	Test Method	Reference	Unit	Limit	MDL
Cadmium(Cd)	IEC 62321-5:2013	ICP-OES	mg/kg	100	2
Lead(Pb)	IEC 62321-5:2013	ICP-OES	mg/kg	1000	2
Mercury(Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES	mg/kg	1000	2
Hexavalent Chromium(CrVI) (Metal)	IEC 62321-7-1:2015	UV-Vis	$\mu\text{g}/\text{cm}^2$	0.13	0.1
Hexavalent Chromium(CrVI) (Nonmetal)	IEC 62321-7-2:2017	UV-Vis	mg/kg	1000	8
PBBs (Next form)	IEC 62321-6:2015	GC-MS	mg/kg	1000	5
PBDEs (Next form)	IEC 62321-6:2015	GC-MS	mg/kg	1000	5
Dibutyl Phthalate(DBP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30
Butyl benzyl phthalate (BBP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30
Di-(2-ethylhexyl) Phthalate(DEHP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30
Diisobutyl phthalate (DIBP)	IEC 62321-8:2017	GC-MS	mg/kg	1000	30



Tested Materials Description

Part No.	Part name	material
1	Black plastic enclosure	plastic
2	transparent plastic enclosure	plastic
3	Internal wire core	metal
4	Internal wire insulation layer	Non-metal
5	Metal enclosure	plastic
6	PCB	Non-metal
7	SMT resistor	Non-metal
8	SMT capacity	Non-metal
9	Watch band	plastic
10	Insulation tape	plastic
11	LCD	Non-metal
12	DC motor	metal
13	Watch buckle	metal
14	Button	metal
15	Bolt	metal

Test Result:

Test Item(s)	NO.1	NO.2	NO.3	NO.4	NO.5
Cadmium(Cd)	BL.	BL	BL	BL	BL
Lead(Pb)	N.D.	BL	BL	BL	BL
Mercury(Hg)	N.D.	BL	BL	BL	BL
Hexavalent Chromium (CrVI)	BL	BL	N.D.	BL	BL
PBBs	BL	BL	N/A	BL	BL
PBDEs	BL	BL	N/A	N.D.	BL
Dibutyl Phthalate (DBP)	BL	BL	N/A	N.D.	BL
Butyl benzyl phthalate (BBP)	BL	BL	N/A	BL	BL
Di-(2-ethylhexyl) Phthalate(DEHP)	BL	BL	N/A	BL	BL
Diisobutyl phthalate (DIBP)	BL	BL	N/A	BL	BL

Test Item(s)	NO.6	NO.7	NO.8	NO.9	NO.10
Cadmium(Cd)	BL.	BL	BL	BL	BL
Lead(Pb)	BL.	BL	BL	BL	BL
Mercury(Hg)	BL.	BL	BL	BL	BL
Hexavalent Chromium (CrVI)	BL	BL	BL	BL	BL
PBBs	BL	BL	BL	BL	BL
PBDEs	BL	BL	BL	BL	BL
Dibutyl Phthalate (DBP)	BL	BL	BL	BL	BL
Butyl benzyl phthalate (BBP)	BL	BL	BL	BL	BL
Di-(2-ethylhexyl) Phthalate(DEHP)	BL	BL	BL	BL	BL
Diisobutyl phthalate (DIBP)	BL	BL	BL	BL	BL



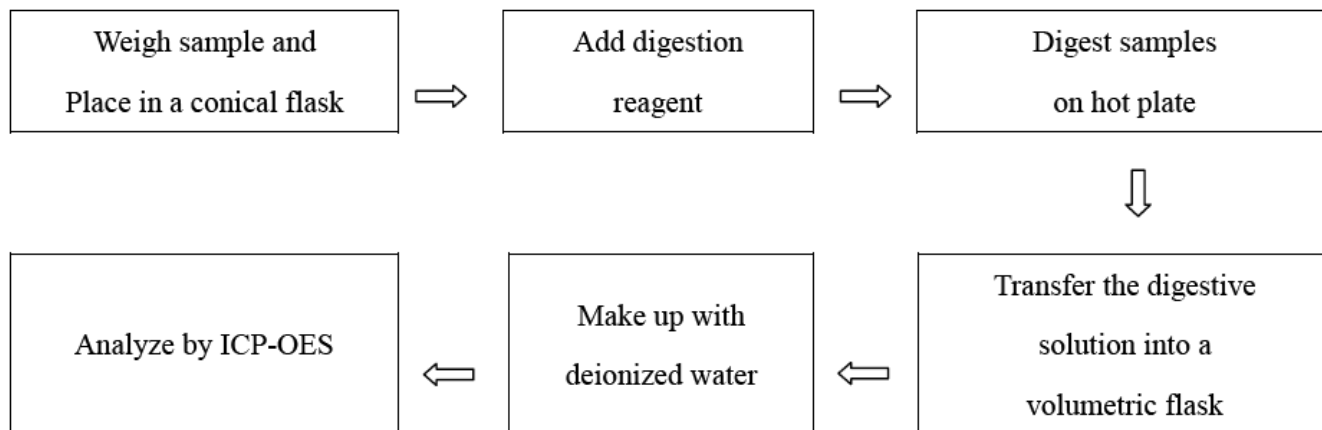
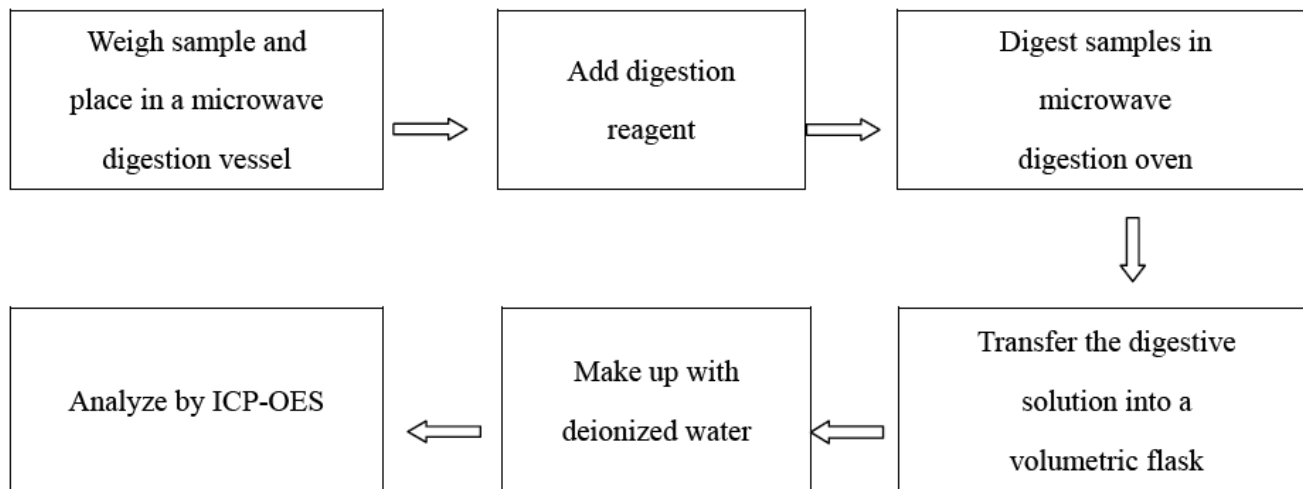
Test Item(s)	NO.11	NO.12	NO.13	NO.14	NO.15
Cadmium(Cd)	BL.	BL	BL	BL	BL
Lead(Pb)	N.D.	BL	BL	BL	BL
Mercury(Hg)	N.D.	BL	BL	BL	BL
Hexavalent Chromium (CrVI)	BL	BL	BL	BL	BL
PBBs	BL	N/A	N/A	N/A	N/A
PBDEs	BL	N/A	N/A	N/A	N/A
Dibutyl Phthalate (DBP)	BL	N/A	N/A	N/A	N/A
Butyl benzyl phthalate (BBP)	BL	N/A	N/A	N/A	N/A
Di-(2-ethylhexyl) Phthalate(DEHP)	BL	N/A	N/A	N/A	N/A
Diisobutyl phthalate (DIBP)	BL	N/A	N/A	N/A	N/A

Remark:**BL:** Below the screening Limit.**OL:** Over the screening Limit**X:** The range of needing to do further testing**IN:** Inconclusive**MDL:** Method detection Limit**N/A:** Not applicable**3σ:** The reproducibility of analytical instruments**LOD:** Detection Limit

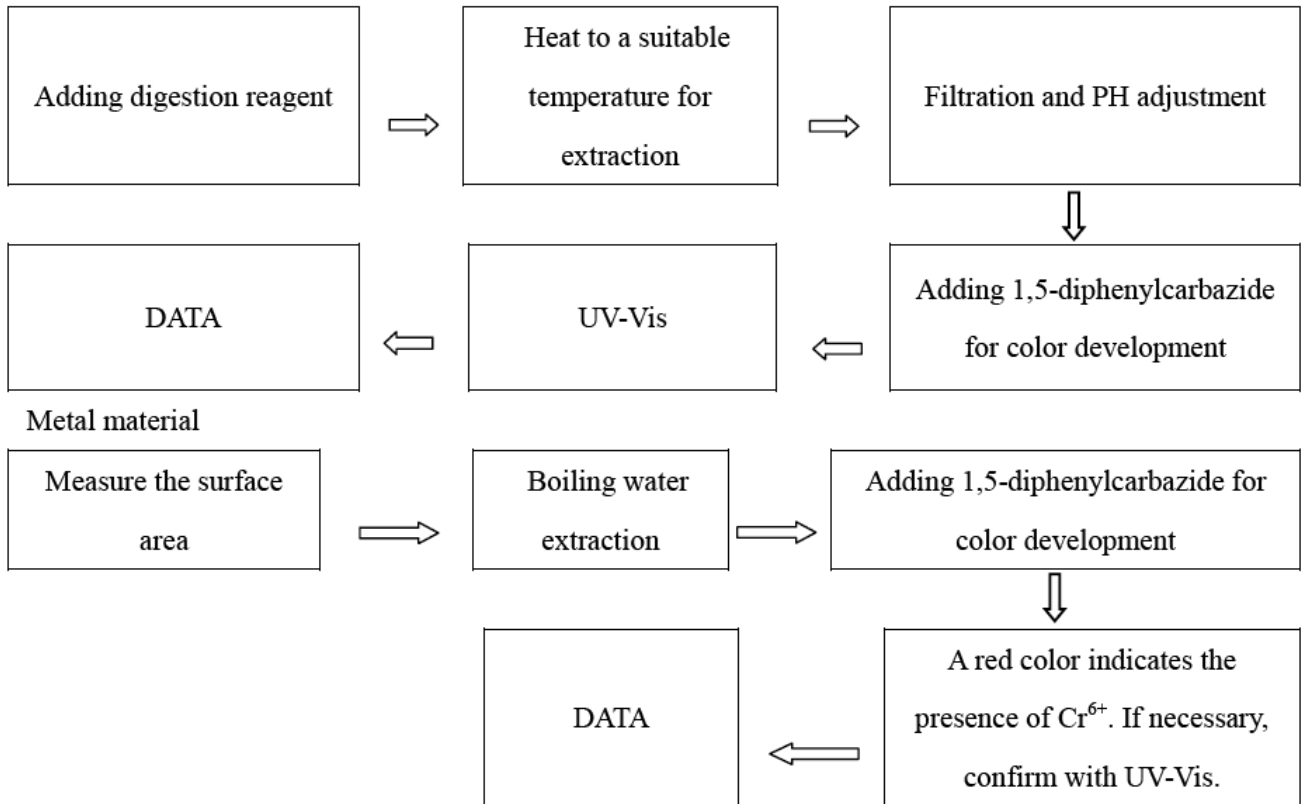
mg/kg: ppm(parts per million, 1000mg/kg=0.1%)

N.D.: Not Detected**MDL :** Method Detection Limit**N/A:** Not applicable

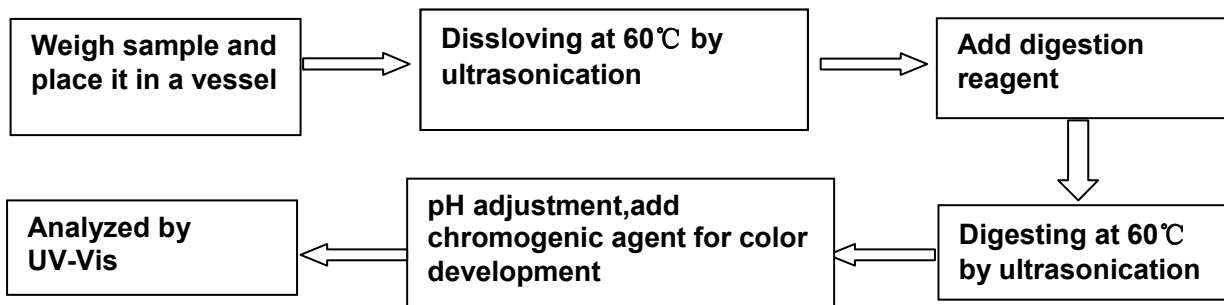
“*” According to 2011/65/EU Annex III point 6(c) Copper alloy containing up to 4 % lead by weight when Cr(VI) in a sample is detected below the 0.10 µg/cm² LOQ (limit of quantification), the sample is considered to be negative for Cr(VI). Since Cr(VI) may not be uniformly distributed in the coating even within the same sample batch, a "grey zone" between 0.10 µg/cm² and 0.13 µg/cm² has been established as "inconclusive" to reduce inconsistent results due to unavoidable coating variations. In this case, additional testing may be necessary to confirm the presence of Cr(VI). When Cr(VI) is detected above 0.13 µg/cm², the sample is considered to be positive for the presence of Cr(VI) in the coating layer. unavoidable coating variations may influence the determination Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

Test Process:**1. Test for Cd/Pb Content****2. Test for Hg Content**

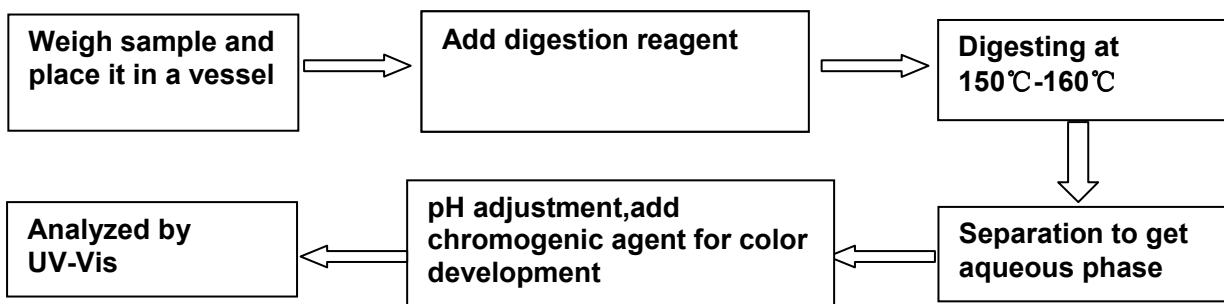
3. Test for Chromium (VI) Content



4 Non-metal sample (Material ABS/PC/PVC)

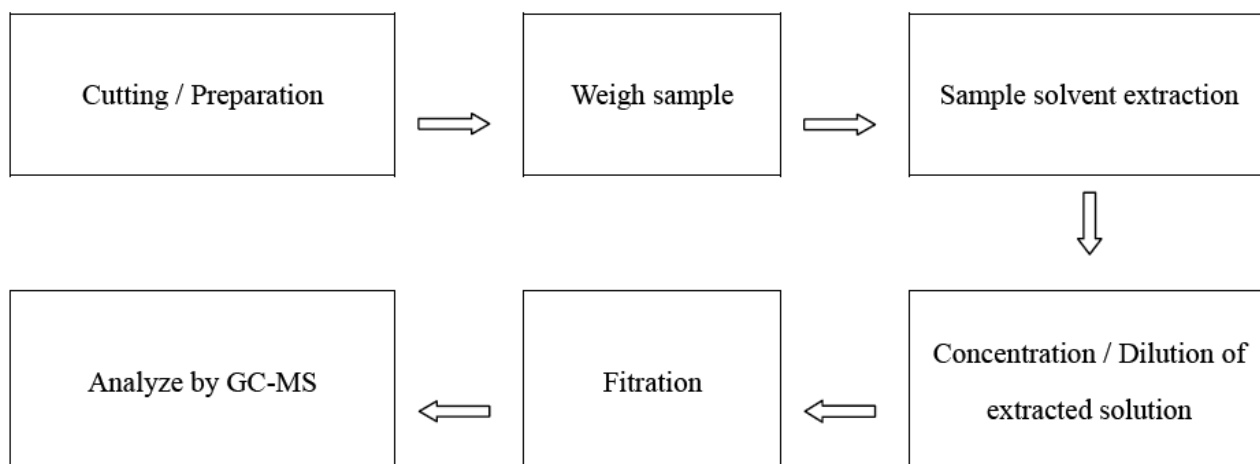


5. Non-metal sample (Other)





6. Test for DBP, BBP, DEHP, DIBP, PBB, PBDE Content



Attachment 1 Photo documentation

Photo 1



Photo 2



Photo 3

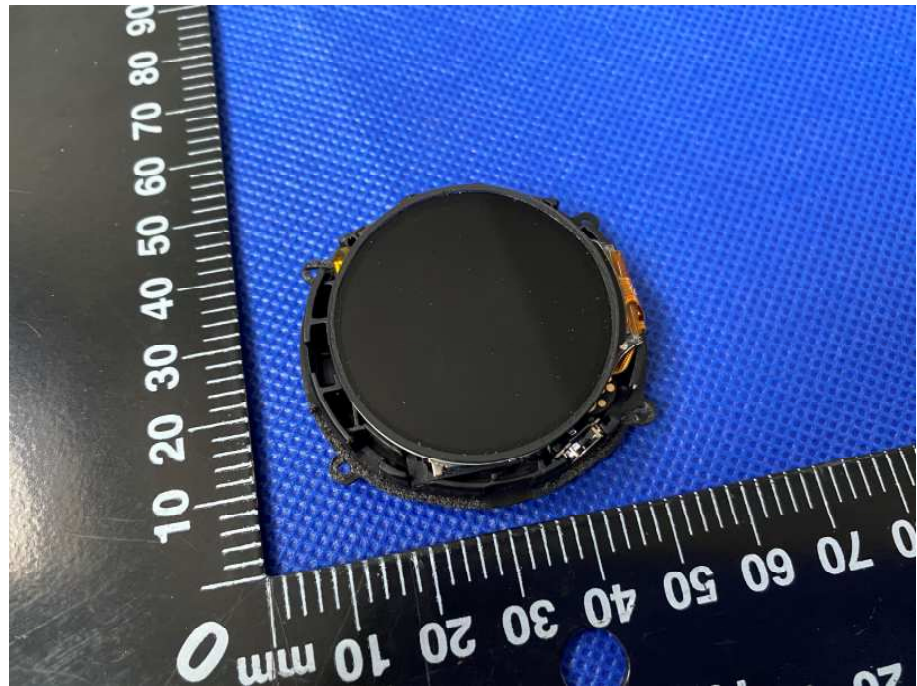
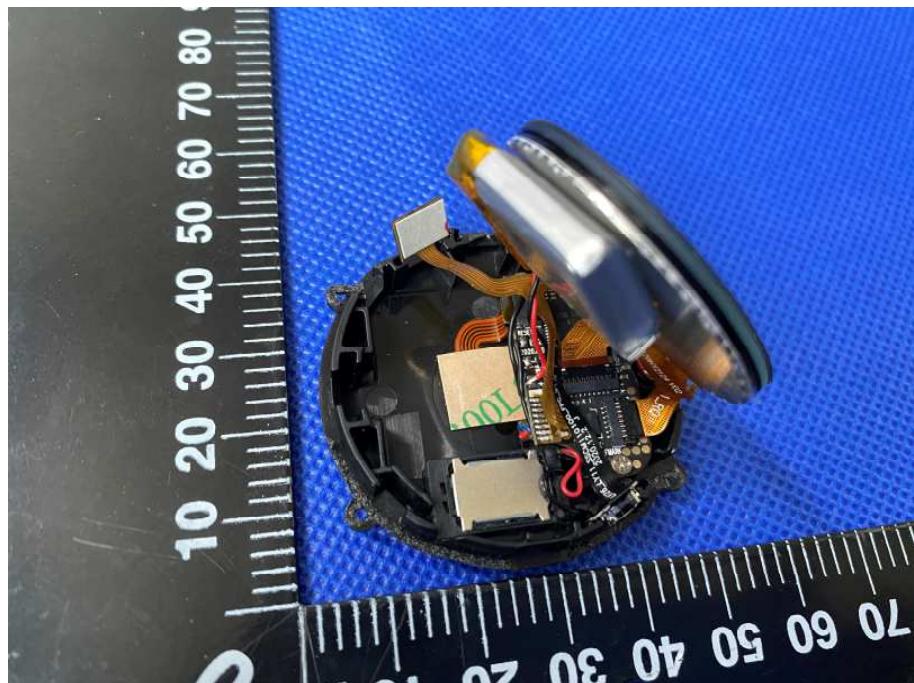


Photo 4



*****END OF REPORT*****