

# Test Report

**Applicant: Paul Stricker SA****Address: Núcleo Industrial de Murte de, Lote 5, 3060-372 Murte de – Portugal****Report on the submitted sample(s) said to be:**

Sample Name : Wireless charger

Sample Model : 97932

Trademark : N/A

Manufacturer :

Address :

Sample Received Date : Oct. 22, 2020

Testing Period : Oct. 22, 2020 to Oct. 30, 2020

Test Method : 1. Screening test method: IEC62321-3-1:2013/XRF

2. Wet chemical test method

Lead(Pb): IEC62321-5:2013/ICP-OES

Cadmium(Cd): IEC62321-5:2013/ICP-OES

Mercury(Hg): IEC62321-4:2013+A1: 2017/ICP-OES

Hexavalent Chromium(CrVI): IEC62321-7-1:2015/UV-VIS and  
IEC62321-7-2:2017/UV-VIS

Polybrominated Biphenyls (PBBs): IEC62321-6:2015 /GC-MS

Polybrominated Biphenyl Ethers(PBDEs): IEC62321-6:2015 /GC-MS

3. Phthalates: IEC62321-8:2017 /GC-MS

Test Results : Refer to the next page(s).

Test Requested	Conclusion
{1} RoHS Directive 2011/65/EU Annex II – Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(CrVI), Polybrominated Biphenyls (PBBs), Polybrominated Biphenyl Ethers(PBDEs)	PASS
{2} RoHS Directive (EU)2015/863 amending Annex II - Dibutyl phthalate (DBP), Butyl benzyl phthalate(BBP), Bis-(2-ethylhexyl)phthalate(DEHP), Di-iso-butyl ortho-phthalate(DIBP)	PASS

Test by: Inspected by: May Chen

Approved by: \_\_\_\_\_

Date: Oct. 30, 2020

# Test Report

{1} Pb 、Cd、Hg、CrVI、PBBs、PBDEs Test Results:

Part No.	Results	Cd	Pb	Hg	Cr <sup>6+</sup>	PBBs	PBDEs	Conclusion on RoHS
1	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
2	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
3	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
4	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
5	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
6	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
7	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
8	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
9	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
10	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
11	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
12	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
13	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply

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## Remark:

(a) It is the result on total Br while test item on restricted substances is PBBs/PBDEs. It is the result on total Cr while test item on restricted substances is Cr6+.

(b) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (for CrVI) and GC/MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1: 2013 (Unit: mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	$BL \leq (70-3\sigma) < X < (130+30\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+30\sigma) \leq OL$	$LOD < X < (150+30\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+30\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+30\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1300+30\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+30\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+30\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1300+30\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	--	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

(c) BL=Below Limit, OL=Over Limit, IN=Inconclusive, LOD=Limit of Detection,

(d) The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition

(e) mg/kg = ppm = 0.0001%, N.D. = not detected (<MDL), --- = not conducted

(f) Unit and Method Detection Limit (MDL) in wet chemical test:

Test Items	Pb	Cd	Hg
Units	mg/kg	mg/kg	mg/kg
MDL	2	2	2

The MDL for single compound of PBBs & PBDEs is 5 mg/kg and MDL of Cr6+ for polymer & composite sample is 2 mg/kg.

(g) According to IEC 62321:2008, result on Cr6+ for metal sample is shown as Positive/Negative.

Positive = Presence of Cr6+ coating, Negative = Absence of Cr6+ coating.

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## {2} Phthalates Test Results

Test Method: Refer to EN14372:2004 and use GC-MS to perform the test

Test Item	CAS No.	Test Method / Instrument	MDL (%)	Limit (%)
Dibutyl phthalate (DBP)	84-74-2	IEC 62321-8:2017 / GC-MS	0.005	0.1
Butyl benzyl phthalate (BBP)	85-68-7	IEC 62321-8:2017 / GC-MS	0.005	0.1
Bis-(2-ethylhexyl)phthalate (DEHP)	117-81-7	IEC 62321-8:2017 / GC-MS	0.005	0.1
Di-iso-butyl ortho-phthalate (DIBP)	84-69-5	IEC 62321-8:2017 / GC-MS	0.005	0.1

Test Item	Result (%)								
	1	2	3	4	5	8	10	12	13
Dibutyl phthalate (DBP)	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Butyl benzyl phthalate(BBP)	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Bis-(2-ethylhexyl) phthalate (DEHP)	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Di-iso-butyl ortho-phthalate (DIBP)	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D

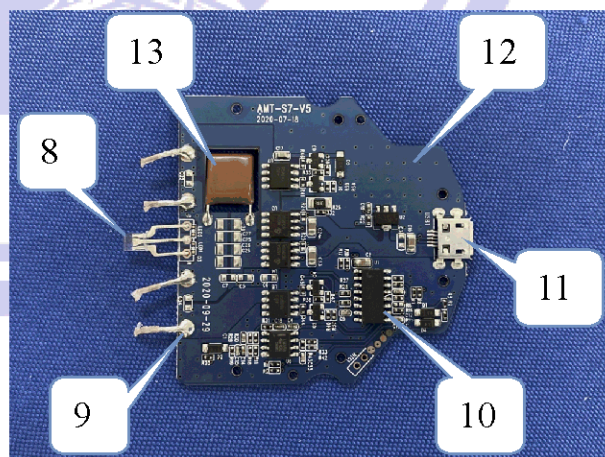
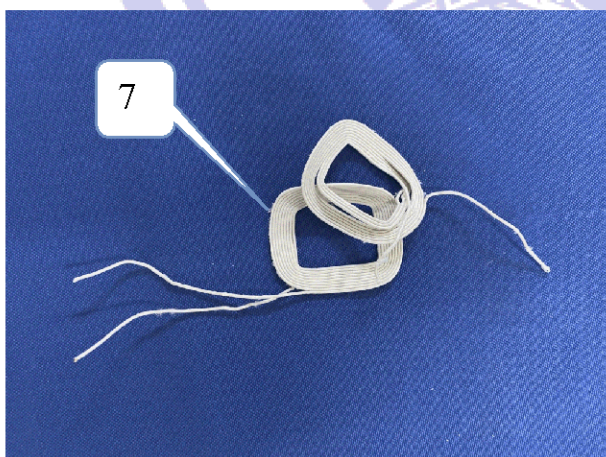
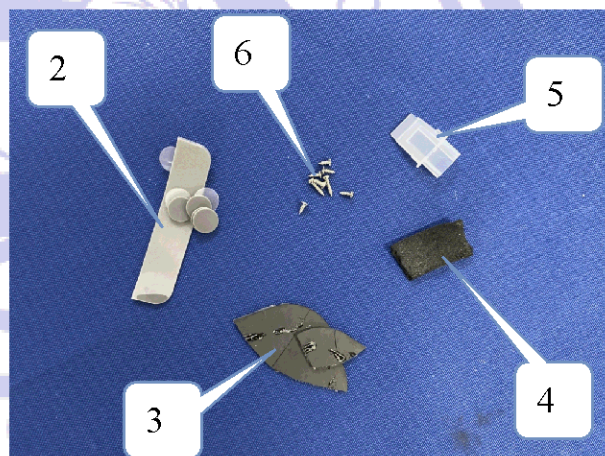
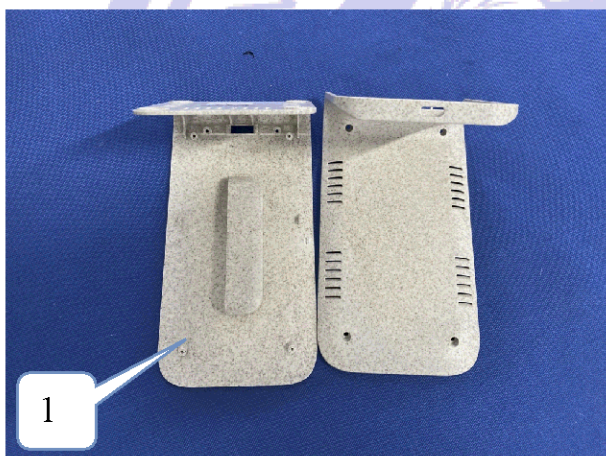
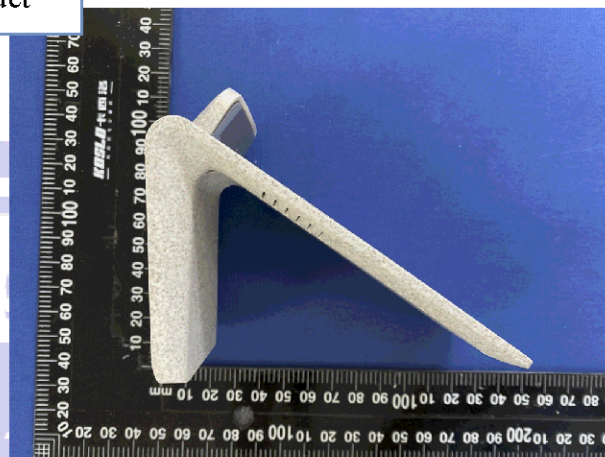
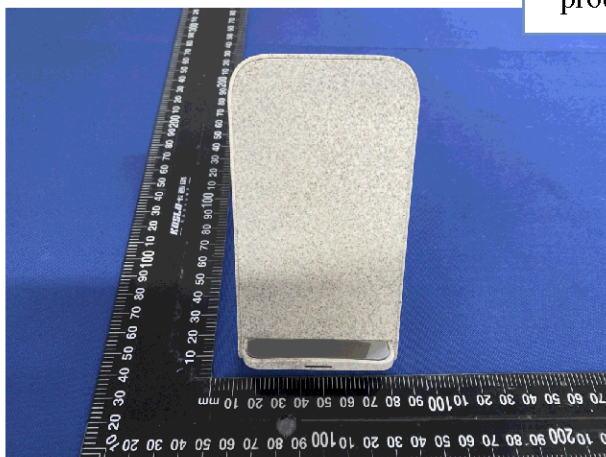
**Note:**

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) N.D. = Not Detected (less than MDL)
- (3) MDL = Method Detection Limit

# Test Report

## Photo(s) of the sample(s)

product



# Test Report

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

**Remark:** This report is considered invalidated without the Special Seal for Inspection of the NCT. This report shall not be altered, increased or deleted. The results shown in this test report refer only to the sample(s) tested. Without written approval of NCT, this test report shall not be copied except in full and published as advertisement.