

Applicant: Wenzhou Laipin Electronic Technology Co., Ltd.

Address: West side of 104 National Highway at Lan Ganqiao intersection, Wanquan Town, Pingyang County, Wenzhou City

Report on the submitted sample(s) said to be:

Sample Name : Wireless mite removal device
 Sample Model : LP-018
 Series Models : N/A
 Trademark : N/A
 Manufacturer : Wenzhou Laipin Electronic Technology Co., Ltd.
 Address : West side of 104 National Highway at Lan Ganqiao intersection, Wanquan Town, Pingyang County, Wenzhou City
 Overhead information : N/A
 Sample Received Date : Oct. 08, 2024
 Testing Period : Oct. 23, 2024
 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).
 Additional information : N/A

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 Report

Test by: Jacelyn

Inspected by: Mark Chen
 Date: Oct 23, 2024

Approved by: Sophia Chen



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

Part No.	Results	Cd	Pb	Hg	Cr ⁶⁺	PBBs	PBDEs	Conclusion on RoHS
1	EDXRF	BL	BL	BL	X	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
2	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
3	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
4	EDXRF	BL	BL	BL	BL	X	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
5	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
6	EDXRF	BL	BL	BL	X	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
7	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
8	EDXRF	BL	BL	BL	BL	X	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
9	EDXRF	BL	BL	BL	X	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
10	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply

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Part No.	Results	Cd	Pb	Hg	Cr ⁶⁺	PBBs	PBDEs	Conclusion on RoHS
11	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
12	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
13	EDXRF	BL	BL	BL	BL	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
14	EDXRF	BL	BL	BL	BL	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
15	EDXRF	BL	BL	BL	X	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
16	EDXRF	BL	BL	BL	X	--	--	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
17	EDXRF	BL	BL	BL	X	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply
18	EDXRF	BL	BL	BL	X	BL	BL	--
	Wet Chemical Testing	--	--	--	--	--	--	Comply

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.

{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	4	5	6	7
Dibutyl phthalate (DBP)	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
Bis-(2-ethylhexyl) phthalate (DEHP)	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

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Test Item	Result (%)					
	8	10	13	15	17	18
Dibutyl phthalate (DBP)	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
Bis-(2-ethylhexyl) phthalate (DEHP)	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

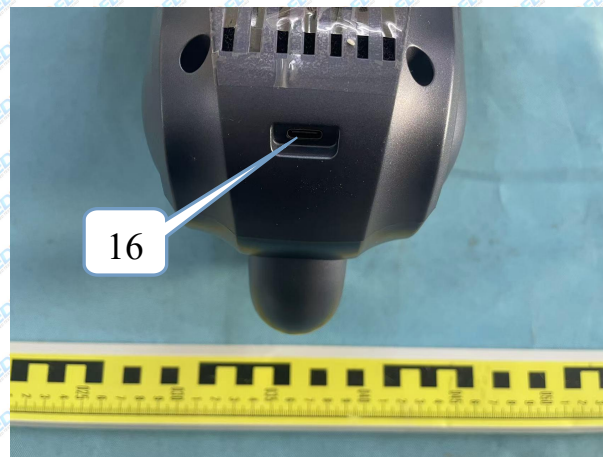
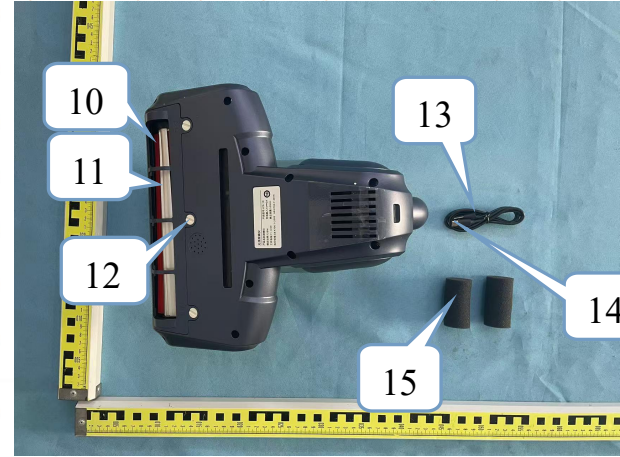
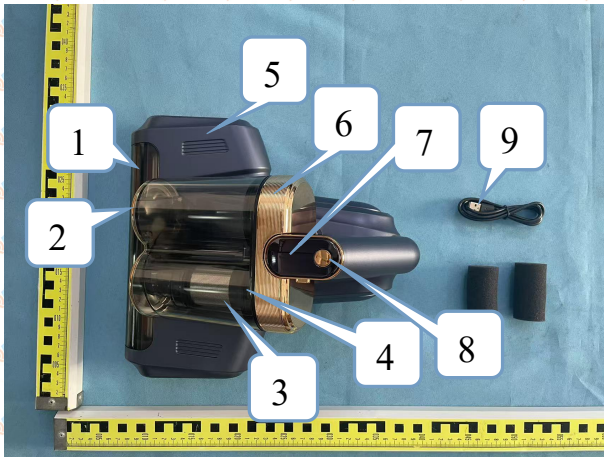
Note:

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

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Photo(s) of the sample(s)

product



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*** End of Report ***

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