



# Rohs Test Report

**Report No.:** VTC-20200506112R1

**Product:** Smart home sensors

Model No.: JMWD01,JMWD02,JMWD03,JMWD04,JMWD05,JMZD01,

JMZD02,JMWG01,JMWG02, JMWZG5, JMPIR01,

JMWG03, JMTRH02, JMIR03, JMWZG1

Applicant: Shenzhen Netplus Tech Co.,Ltd

2/F,Building D, Senhainuo Weijian Industrial

Address: Park, Shiyan, Bao'an, Shenzhen

**Issued by:** Shenzhen VTC Testing Technology Co., Ltd.

211 Factory Room, No. 96, Yangchong Road,

Lab Location: Tangxiachong Community, Yanluo Street, Bao'an

District, Shenzhen, Guangdong, China

Date of Receipt:

Apr.28, 2020 **Date of Test:** 

Apr.28, 2020- May.06,2020

Date of Issue: May.06,2020

Test Result: Pass

<u>Testing Engineer</u>:

Technical Manager : (Fan Lian)

Authorize Signatory: (Jesse Liu)

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## **TEST REPORT**

Applicant : Shenzhen Netplus Tech Co.,Ltd

Applicant Address : 2/F, Building D, Senhainuo Weijian Industrial Park, Shiyan, Bao'an,

Shenzhen

The following sample was submitted by the client as:

Product Name : Smart home sensors

Mode No. : JMWD01,JMWD02,JMWD03,JMWD04,JMWD05, JMZD01,

JMZD02,JMWG01,JMWG02, JMWZG5, JMPIR01,

JMWG03, JMTRH02, JMIR03, JMWZG1

Trade Mark. : N/A

Manufacturer : Shenzhen Netplus Tech Co.,Ltd

2/F, Building D, Senhainuo Weijian Industrial Park, Shiyan, Bao'an,

Shenzhen

Test Requested : EU RoHS Directive 2011/65/EU and its amendment directives 2015/863/EU

(RoHS 2.0) on Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs,

PBDEs, DEHP, BBP, DBP & DIBP content

Test Standard : IEC 62321-4-2013+A1:2017 IEC 62321-5-2013

IEC 62321-7-2-2017 IEC 62321-6-2015

IEC 62321-8-2017

Test Results : Pass

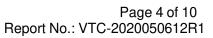
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# Test Method (s):

Chemical testing methods & Equipments

Testing Item	Testing Method	Equipment	Equipment No.	Cal Date	Due Date
Lead (Pb)	IEC 62321-5-2013 (Ed1.0)	ICP-OES	YQ-174	July.14, 2019	July.13, 2020
Cadmium (Cd)	IEC 62321-5-2013 (Ed1.0)	ICP-OES	YQ-174	July.14, 2019	July.13, 2020
Mercury (Hg)	IEC 62321-4-2013 +A1:2017	ICP-OES	YQ-174	July.14, 2019	July.13, 2020
Hexavalent chromium (Cr(VI))	IEC 62321-7-2-2017 (Ed1.0)*	UV-VIS	YQ-177	July.14, 2019	July.13, 2020
PBBs	IEC 62321-6-2015 (Ed1.0)	GC-MS	YQ-211	July.14, 2019	July.13, 2020
PBDEs	IEC 62321-6-2015 (Ed1.0)	GC-MS	YQ-211	July.14, 2019	July.13, 2020
DBP	IEC 62321-8-2017 (Ed1.0)	GC-MS	YQ-211	July.14, 2019	July.13, 2020
BBP	IEC 62321-8-2017 (Ed1.0)	GC-MS	YQ-211	July.14, 2019	July.13, 2020
DEHP	IEC 62321-8-2017 (Ed1.0)	GC-MS	YQ-211	July.14, 2019	July.13, 2020
DIBP	IEC 62321-8-2017 (Ed1.0)	GC-MS	YQ-211	July.14, 2019	July.13, 2020





Seq. No.	Tes	ited Part(s	s)
1	White plastic shell	7	SMD inductance
2	Tags	8	Wreless module
3	Screw	9	Cooper Wire
4	SMD IC	10	Coating of PCB
5	SMD capacitance	11	PCB
6	SMD resistor	12	Tin



Test Item(s):	RESULT								MDL
( )	1	2	3	4	5	6	7	8	
Cadmium(Cd)	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	2
Lead(Pb)	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	2
Mercury(Hg)	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	2
Hexavalent Chromium Cr(VI) by alkaline extraction	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	8
Sum of PBBs	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	_
Monobromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Dibromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Tribromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Tetrabromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Pentabromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Hexabromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Heptabromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Octabromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Nonabromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Decabromo biphenyl	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Sum of PBDEs	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	_
Monobromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Dibromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Tribromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Tetrabromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Pentabromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Hexabromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Heptabromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Octabromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Nonabromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Decabromobiphenyl ether	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	5
Dibutyl Phthalate(DBP)	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	50
Benzyl butyl phthalate (BBP)	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	50
Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	50
Diisobutyl Phthalate(DIBP)	N.D	N.D	N.A	N.D	N.D	N.D	N.D	N.D	50



Test Item(s):		MDL				
	9	10	11	12		
Cadmium(Cd)	N.D	N.D	N.D	N.D		2
Lead(Pb)	N.D	N.D	N.D	N.D		2
Mercury(Hg)	N.D	N.D	N.D	N.D		2
Hexavalent Chromium Cr(VI) by alkaline extraction	N.D	N.D	N.D	N.D		8
Sum of PBBs	N.D	N.D	N.D	N.A		_
Monobromo biphenyl	N.D	N.D	N.D	N.A		5
Dibromo biphenyl	N.D	N.D	N.D	N.A		5
Tribromo biphenyl	N.D	N.D	N.D	N.A		5
Tetrabromo biphenyl	N.D	N.D	N.D	N.A		5
Pentabromo biphenyl	N.D	N.D	N.D	N.A		5
Hexabromo biphenyl	N.D	N.D	N.D	N.A		5
Heptabromo biphenyl	N.D	N.D	N.D	N.A		5
Octabromo biphenyl	N.D	N.D	N.D	N.A		5
Nonabromo biphenyl	N.D	N.D	N.D	N.A		5
Decabromo biphenyl	N.D	N.D	N.D	N.A		5
Sum of PBDEs	N.D	N.D	N.D	N.A		_
Monobromobiphenyl ether	N.D	N.D	N.D	N.A		5
Dibromobiphenyl ether	N.D	N.D	N.D	N.A		5
Tribromobiphenyl ether	N.D	N.D	N.D	N.A		5
Tetrabromobiphenyl ether	N.D	N.D	N.D	N.A		5
Pentabromobiphenyl ether	N.D	N.D	N.D	N.A		5
Hexabromobiphenyl ether	N.D	N.D	N.D	N.A		5
Heptabromobiphenyl ether	N.D	N.D	N.D	N.A		5
Octabromobiphenyl ether	N.D	N.D	N.D	N.A		5
Nonabromobiphenyl ether	N.D	N.D	N.D	N.A		5
Decabromobiphenyl ether	N.D	N.D	N.D	N.A		5
Dibutyl Phthalate(DBP)	N.D	N.D	N.D	N.A		50
Benzyl butyl phthalate (BBP)	N.D	N.D	N.D	N.A		50
Bis-(2-ethylhexyl)-Phthalate (DEHP)	N.D	N.D	N.D	N.A		50
Diisobutyl Phthalate(DIBP)	N.D	N.D	N.D	N.A		50

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Note:

mg/kg=milligram per kilogram ND=Not Detected(<MDL) MDL=Method Detection Limit

1. 2.

3.

NA=Not Applicable "—" =Not regulated 4.

5.

RoHS Requirement(mg/kg):

Restricted substances	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	BBP	DBP	DEHP	DIBP
RoHS limit	100	1000	1000	1000	1000	1000	1000	1000	1000	1000

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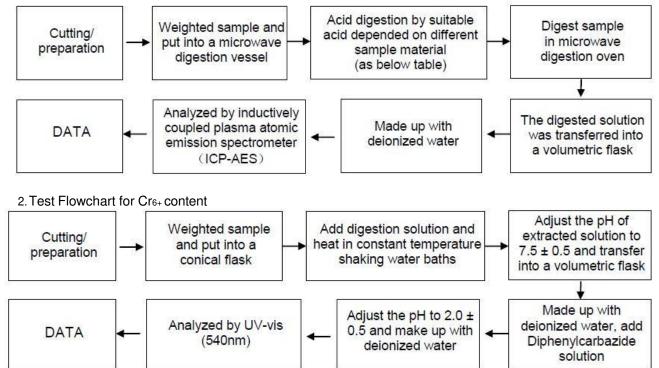


# **Appendix**

#### **Test Flow chart**

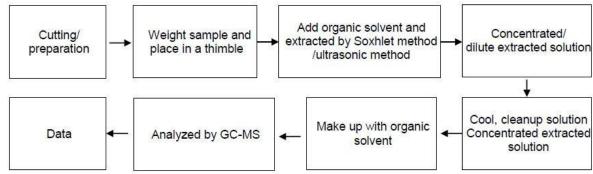
1. Test Flowchart for Cd / Pb /Hg content

These samples were dissolved totally by pre-conditioning method according to below flow chart.

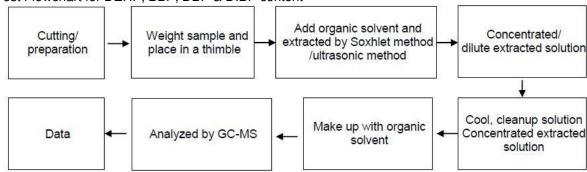




# 3. Test Flowchart for PBBs & PBDEs content



## 4. Test Flowchart for DEHP, BBP, DBP & DIBP content



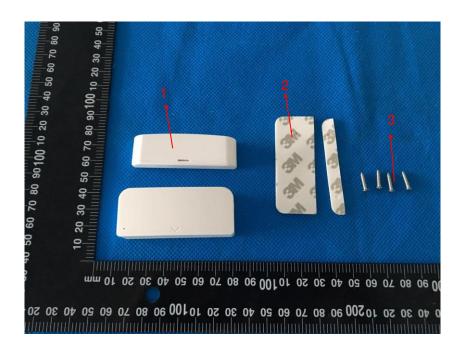
_	-	-	-

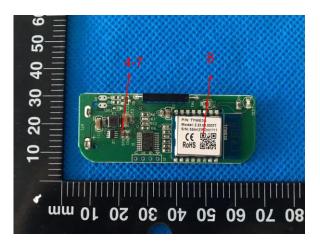
Sample material	Digestion Acid	
Steel, copper, aluminum, solder	Aqua regia, HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub>	
Glass	HNO <sub>3</sub> /HF	
Gold, platinum, palladium, ceramic	Aqua regia	
Silver	HNO <sub>3</sub>	
Plastic	H <sub>2</sub> SO <sub>4</sub> , H <sub>2</sub> O <sub>2</sub> , HNO <sub>3</sub> , HCI	
Others	Any acid to total digestion	

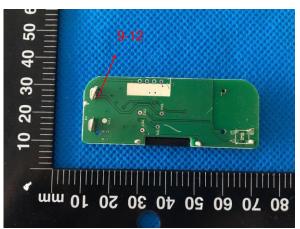




## **EUT PHOTO**







---End of Report---