True Safety Testing

Certificate Of Compliance

Certificate No.	:	TST20240506131-3RC
Applicant	:	012128 XXXXX
Manufacturer	:	012128 XXXXX
Sample Name	:	Universal adapter
Main Model	:	14448
Series Model	:	JD2225,JD2226
Test Standard	:	IEC 62321-1:2013 IEC 62321-3-1:2013 IEC 62321-4:2013/AMD1:2017 IEC 62321-5:2013 IEC 62321-6:2015 IEC 62321-7-1:2015 IEC 62321-7-2:2017 IEC 62321-8:2017
As shown in the Test Report No.	:	TST20240506131-3RR

The EUT described above has been consolidated by us and found in compliance with the council RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU.

The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production. It is only valid in connection with the test report Number TST20240506131-3RR

RoHS

Andy

Certification Manager

Date:May 23, 2024

Dongguan True Safety Testing Co., Ltd. Approve

Dongguan True Safety Testing Co., Ltd.
Room 201, No.20, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China
Tel: +86-0769-85088050 4001086960 E-mail:tst@tst-test.com http://www.tst-test.com

Test Report

Applicant : 012128

Address : XXXXX

Manufacturer : 012128

Address : XXXXX

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

Sample Name : Universal adapter

Main Model : 14448

Series Model : JD2225,JD2226

Sample Received Date : May 20, 2024

Testing Period : May 20, 2024 To May 23, 2024

Test Requested :
1. As specified by client ,to screen Lead(Pb),Cadmium(Cd),Mercury(Hg), Chromium(Cr)and Bromine(Br)in the submitted sample(s)by XRF.
2. As specified by client ,when screening results exceed the XRF screening limit in IEC62321:2013 Edition 1.0,further use of wet chemical methods are required to test Lead(Pb),Cadmium(Cd),Mercury(Hg),Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs),Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP), Dibutylphthalate (DBP) , and Diisobutyl phthalate (DIBP) in the submitted sample(s).

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

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

Test Conclusion : The test results comply with the limits of 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

Andy

Andy Zheng
Technical Director

Dongguan True Safety Testing Co., Ltd. Approve

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Room 201, No.20, East of Houjie Avenue, Houjie, Dongguan, Guangdong, China
Tel:+86-0769-85088050 Fax:+86-0769-81221086 E-mail:tst@tst-test.com Http:www.tst-test.com

1.Pb, Cd, Cr(VI), Hg, PBBs&PBDEs

Test Method:

A.Disassembly, disjointment and mechanical sample preparation

—Ref. to IEC 62321-2:2021, Disassembly, disjointment and mechanical sample preparation.

B.With reference to IEC 62321-1:2013, tests were performed for the samples indicated by the photos in this report.

(1)Screening – Lead, mercury, cadmium, total chromium and total bromine

—Ref. to IEC 62321-3-1:2013, Screening for Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry.

(2)Wet chemical test method

Test Item(s)	Test Method	Test Equipment	Unit	MDL	Limit
Pb	IEC62321-5:2013	ICP-OES	mg/kg	10	1000
Cd	IEC62321-5:2013	ICP-OES	mg/kg	10	100
Hg	IEC 62321-4:2013/AMD1:2017	ICP-OES	mg/kg	10	1000
Cr(VI) (Metal)	IEC62321-7-1:2015	UV-Vis	$\mu g/cm^2$	0.1	0.13
Cr(VI) (Nonmetal)	IEC62321-7-2:2017	UV-Vis	mg/kg	10	1000
PBBs	IEC62321-6:2015	GC-MS	mg/kg	10	1000
PBDEs	IEC62321-6:2015	GC-MS	mg/kg	10	1000

PBBs		PBDEs	
Monobromobiphenyl	Hexabromobiphenyl	Monobromodiphenyl ether	Hexabromodiphenyl ether
Dibromobiphenyl	Heptabromobiphenyl	Dibromodiphenyl ether	Heptabromodiphenyl ether
Tribromobiphenyl	Octabromobiphenyl	Tribromodiphenyl ether	Octabromodiphenyl ether
Tetrabromobiphenyl	Nonabromobiphenyl	Tetrabromodiphenyl ether	Nonabromodiphenyl ether
Pentabromobiphenyl	Decabromobiphenyl	Pentabromodiphenyl ether	Decabromodiphenyl ether

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Test Report

Test result(s):

No.	Sample Description	Results of XRF					Chemical confirmation results (mg/kg)	Conclusion
		Pb	Cd	Hg	Cr	Br		
1	Adapter housing	BL	BL	BL	BL	BL	---	Pass
2	Adapter plug	BL	BL	BL	BL	---	---	Pass
3	Silver metal	BL	BL	BL	BL	---	---	Pass
4	Gold metal	BL	BL	BL	BL	---	---	Pass
5	White plastic	BL	BL	BL	BL	BL	---	Pass

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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 Cr(VI).

b. The XRF screening test for RoHS elements-The reading may be different to the actual content in the sample be of non-uniformity composition.

c. Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Pb, Cd, Hg), UV-VIS for Cr(VI) and GC-MS (for PBBs/PBDEs) is recommended to be performed if the concentration exceeds the below warming value according to IEC 62321-3-1:2013.

XRF Screening limits for different matrices :

Materials	**Concentration (mg/kg)**				
	Cd	**Cr**	**Pb**	**Hg**	**Br**
Polymeric	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	BL≤290<X
Metallic	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	---
Composite materials	BL≤40<X<160≤OL	BL≤440<X	BL≤470<X<1530≤OL	BL≤460<X<1540≤OL	BL≤240<X

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Note:

-BL= Below Limit

-OL=Over Limit

-X **=** inconclusive, the region where need further chemical testing by ICP-OES (for Pb, Cd, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs).

- --- = Not Applicable

- mg/kg=milligrams per kilogram

- N.D.=Not Detected(<MDL)

- MDL= Method Detection Limit

-Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.02 mg/kg with 50cm^2 sample surface area used.

-*=According to 2011/65/EU Annex,point *Lead as an alloying element is steel containing up to 0.35% lead by weight, aluminum containing up to 0.4% lead by weight and as a copper alloy, containing up to 4% lead by weight can be exempted.

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2. Phthalates—DBP, BBP, DEHP & DIBP

Test Item(s)	Test Method	Test Equipment	Unit	MDL	Limit
Dibutyl Phthalate(DBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Benzylbutyl Phthalate (BBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Di-(2-ethylhexyl)Phthalate (DEHP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000
Diisobutyl phthalate(DIBP)	IEC62321-8:2017	GC-MS	mg/kg	30	1000

Test result(s):

Part No.	Test Item (mg/kg)				Conclusion
	DBP	BBP	DEHP	DIBP	
1	N.D.	N.D.	N.D.	N.D.	Pass
5	N.D.	N.D.	N.D.	N.D.	Pass

Note: - mg/kg=milligrams per kilogram

-N.D.=Not Detected(<MDL)

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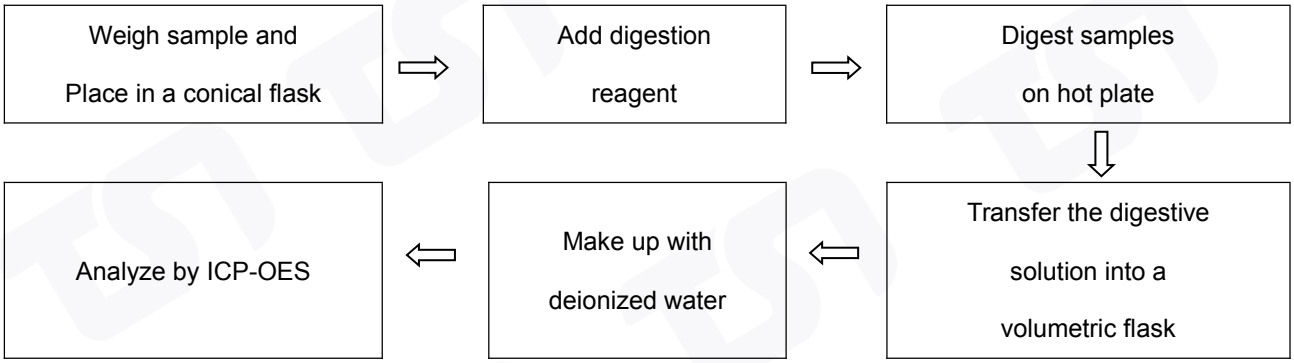
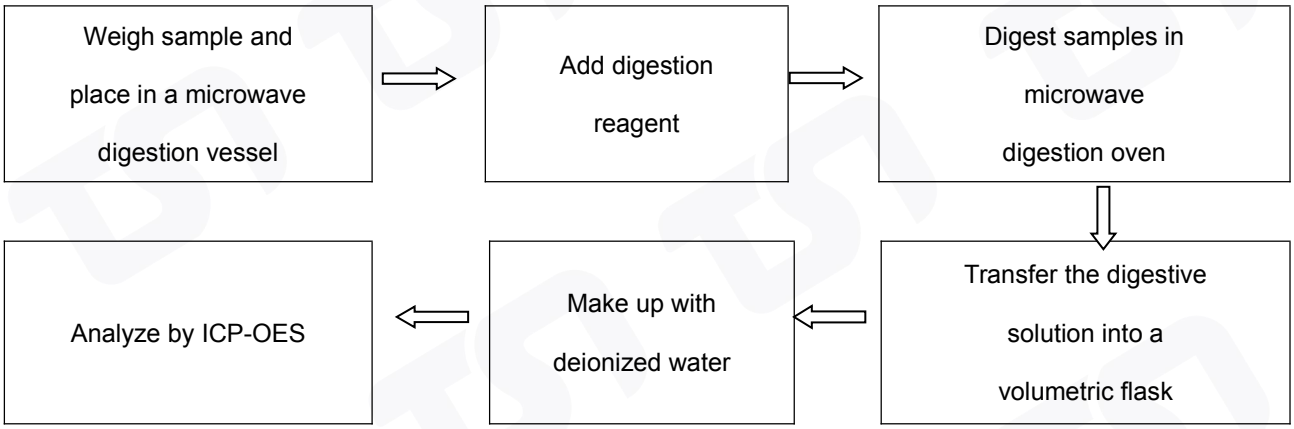
Chemical Test Process:

1.Test for Cd/Pb Content



2. Test for Hg Content



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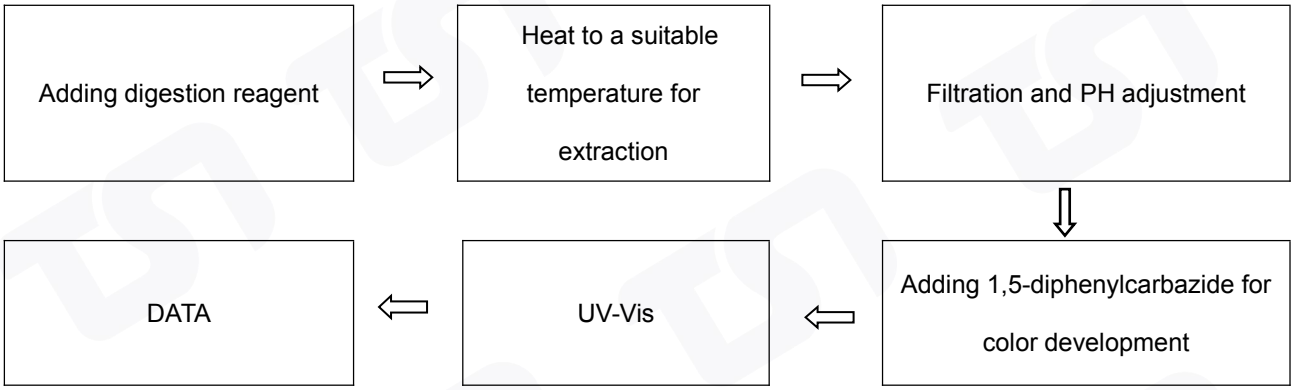
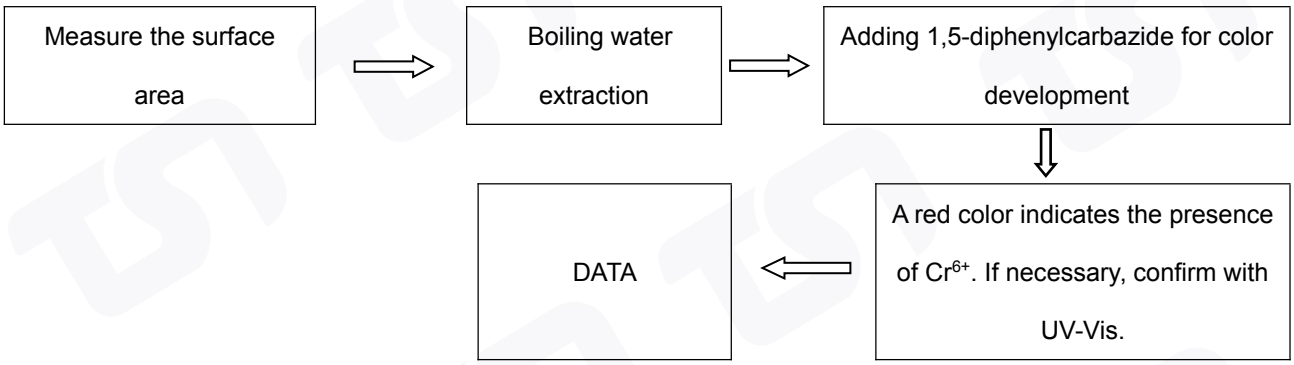
3. Test for Chromium (VI) Content

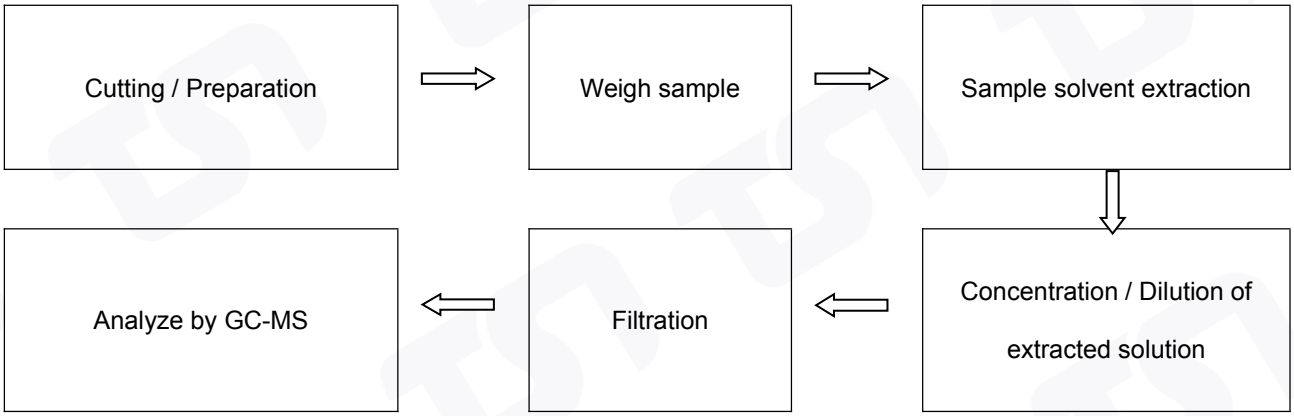
Nonmetal material



Metal material



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



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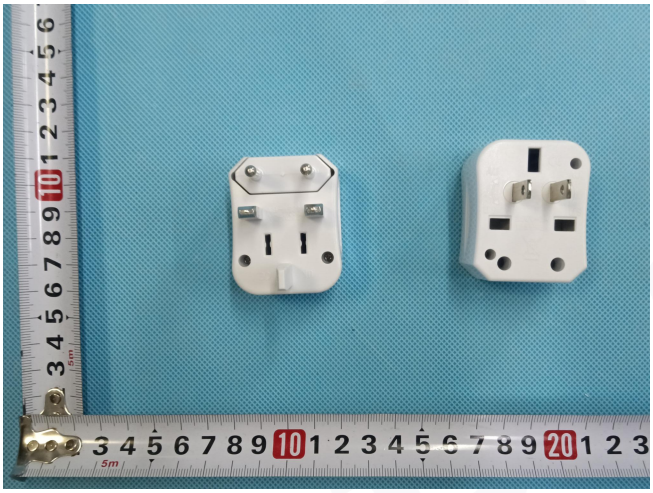
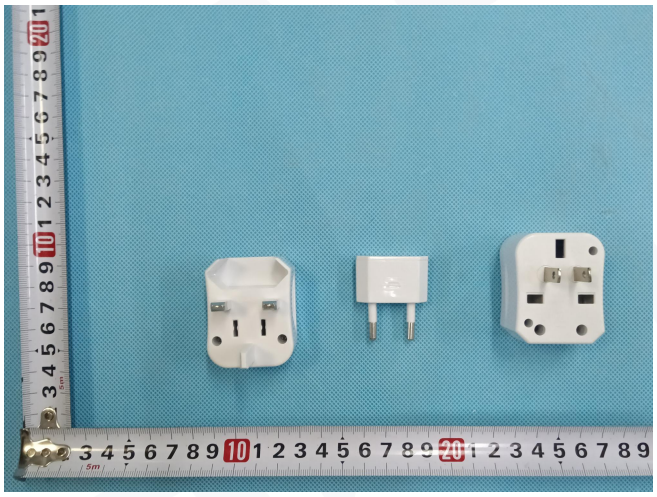
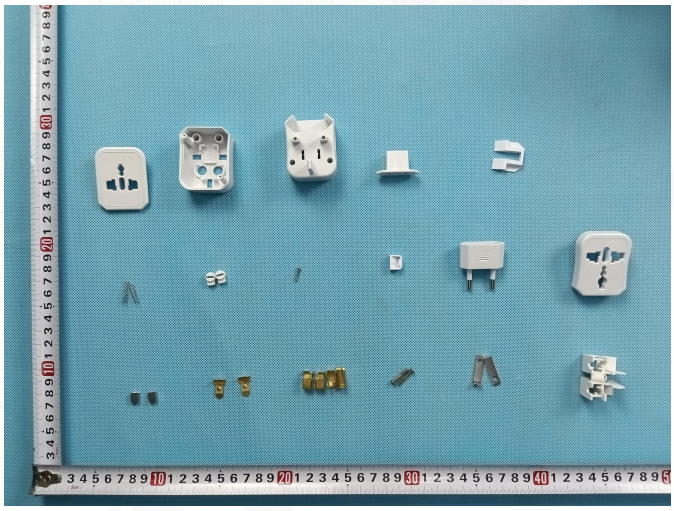
Sample pictures:







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

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