

TEST REPORT

<u>APPLICANT</u>	: Xindao B.V.
<u>ADDRESS</u>	: P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
<u>SAMPLE DESCRIPTION</u>	: Sun solo solar charger
<u>ITEM NO.</u>	: P323. 01
<u>COUNTRY OF ORIGIN</u>	: China
<u>COUNTRY OF DESTINATION</u>	: Europe
<u>SAMPLE RECEIVED DATE</u>	: 09-Mar-2015
<u>TURN AROUND TIME</u>	: 09-Mar-2015 to 17-Mar-2015
<u>TEST SPECIFICATION</u>	: EC Directive 2011/65/EU —The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment — (RoHS)
<u>CONCLUSION</u>	: Based on the analysis on the submitted sample(s), the test results do comply with the RoHS directive 2011/65/EU.

The following test item(s) was/were performed on selected sample(s) and/or component(s) appointed by applicant.

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***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins Product Testing Service(Shanghai) Co., Ltd. Hangzhou Branch



Terric Ji
Lab Manager

Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to sh.info@eurofins.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd.

SAMPLE PHOTO



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TO BE CONTINUED

COMPONENT PHOTO(S)



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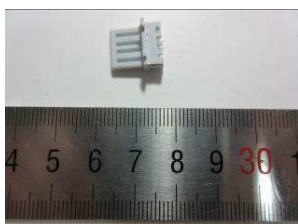
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TO BE CONTINUED

COMPONENT PHOTO(S)



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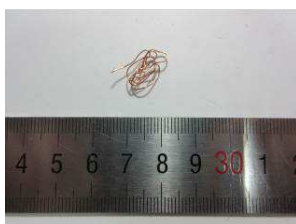
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TO BE CONTINUED

TEST RESULT

A. Screening Test by XRF Spectroscopy

As specified by client, to analyze the contents of Lead, Cadmium, Mercury, Chromium, Bromine in the submitted sample by XRF. Screening limits in mg/kg for regulated elements in various matrices according to IEC 62321-3-1:2013 Ed.1

No.	Component	Test Results (mg/kg)				
		Cd	Pb	Hg	Cr	Br
		Limit (mg/kg)				
		100	1000	1000	Cr(VI):1000	PBB:1000 PBDE:1000
1	Silver metal pin of plug 1	ND	ND	ND	NC	NA
2	White rubber plug 1	ND	ND	ND	122	ND
3	Silver metal pin of plug 2	ND	593(*2)	ND	NC	NA
4	White rubber plug 2	ND	169	ND	203	ND
5	White rubber wire sheath	ND	ND	ND	ND	ND
6	Circuit board	ND	ND	ND	ND	NC
7	Soldering tin	ND	480	ND	NC	NA
8	Yellow plastic adhesive tape	ND	ND	ND	659	ND
9	Black sponge	ND	ND	ND	ND	ND
10	Silver metal block	ND	971(*2)	ND	NC	NA
11	Silver metal wire	ND	388	ND	NC	NA
12	Black electronic component	ND	ND	ND	ND	NC
13	White plastic block	ND	ND	ND	ND	ND
14	Red rubber wire sheath	ND	ND	ND	360	ND
15	Blue rubber wire sheath	ND	ND	ND	274	ND
16	Black rubber wire sheath	ND	ND	ND	ND	ND
17	Silver battery	ND	ND	ND	308	ND
18	Black rubber block	ND	ND	ND	ND	ND
19	Silver metal spring	24	183	ND	NC	NA
20	Golden metal wire	ND	1080(*1)	ND	NC	NA
21	White paper adhesive tape	ND	ND	ND	282	ND
22	Silver metal screw	ND	ND	ND	NC	NA
23	Black plastic block	ND	ND	ND	ND	ND
24	White plastic shell	ND	ND	ND	ND	NC
25	Black plastic shell	ND	ND	ND	ND	NC

Note:

(*1) As a copper alloy containing up to 4% lead by weight (RoHS Exemption 6(c)).

(*2) Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35 % lead by weight (RoHS Exemption 6(a)).

TO BE CONTINUED

TEST RESULT

Abbreviation:

Pb	denotes Lead
Cd	denotes Cadmium
Hg	denotes Mercury
Cr	denotes Chromium
Cr(VI)	denotes Chromium(VI)
Br	denotes Bromine
PBBs	denotes Total Polybrominated Biphenyls
PBDEs	denotes Total Polybrominated Diphenyl Ethers
N.A.	denotes Not Applicable
N.D.	denotes Not Detected (Nonmetal<10mg/kg,Metal<50mg/kg)
N.C.	denotes Not Conclusive

XRF Screening limits for different materials:

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

Note:

BL= Below limit

X = The region where further investigation is necessary

OL = Over limit

3σ = The repeatability of the analyzer at the action level

LOD = Limit of detection

XRF testing results are only used for reference.

B. Confirmation Test by Wet Chemistry

Tested Item(s)	Test Method	Measured Equipment	MDL
Lead (Pb) /Cadmium (Cd)	IEC 62321-5:2013 Ed.1	ICP-OES	2 mg/kg
Mercury (Hg)	IEC 62321-4:2013 Ed.1	ICP-OES	2 mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex B	UV-Vis	/
	IEC 62321:2008 Ed.1 Annex C		2 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
Polybrominated DiphenylEthers (PBDEs)			

TO BE CONTINUED

TEST RESULT

Component No.	Spot test for Cr(VI) (*3)	Boiling-water-extraction for Cr(VI) (*3)
1	Negative	-
3	Negative	-
7	Negative	-
10	Negative	-
11	Negative	-
19	Negative	-
20	Negative	-
22	Negative	-

Remark:

(*3) The screening result of Chromium(VI) was found in the inconclusive region, Thus the Chromium(VI) content in surface layer have been confirmed with reference to IEC 62321.

Component No.	Test Results (mg/kg)					
	Cd	Pb	Hg	Cr (VI)	PBBs	PBDEs
	Limit (mg/kg)					
	100	1000	1000	1000	1000	1000
6	-	-	-	-	ND	ND
12	-	-	-	-	ND	ND
24	-	-	-	-	ND	ND
25	-	-	-	-	ND	ND

Note:

The sample had been dissolved totally tested for Lead, Cadmium, Mercury.

MDL = method detection limit

ND = not detected (<MDL)

mg/kg = milligram per kilogram

*** END OF THE REPORT ***