

No. BCTC-FYC190627012R

Date: June. 27, 2019

Page 1 of 9

BCTC

BCIC

TU

BCTC

BCTC

Applicant Address

The submitted sample and sample information was/were submitted and identified by/on the behalf of the client RCTC Sample name

Sample received date **Testing period**

BCTC

June. 17, 2019 June. 17, 2019 - June. 27, 2019

Test requested

BCIC

BCTC

BCTC

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.

acto

2. As specified by client, when screening results exceed the XRF screening limit in IEC 62321-3-1:2013, further use of chemical methods are required to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the submitted samples.

3. As specified by client, to test the Di-isobutyl phthalate(DIBP), Dibutyl phthalate(DBP), Benzyl butyl phthalate(BBP), Bis(2-ethyl(hexyl) phthalate)(DEHP)in the submitted sample(s).

According to the RoHS Directive 2011/65/EU and amendment Commission Delegated Directive (EU) 2015/863

BCTC

*****For more detailed information, please refer to the next page*****

Tested by Xingping Li BCIC



Lab:Shenzhen BCTC Testing Co.,Ltd.

Add:BCTC Building & 1-2F,East of B Building,pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community, Fuyong Street, Bao 'an District, Shenzhen, China Tel: (86)0755-33229357 Fax: 0755-33229357

400 -788 -9558 www.bctc-lab.com

Test Report

No. BCTC-FYC190627012R

Date: June. 27, 2019

BCTC

Page 2 of 9

BCTC

BETC

BCTC

BCTC

BCTC

Test Method:

BCTC

SCTC

A. Screening test by XRF spectroscopy

立测

BCTC

XRF screening limits in mg/kg for regulated elements according to IEC 62321-3-1:2013.

BCIL	Limit of IEC 62321-3	MDL		
Element	Polymers and metals	Composite material	Polymers	Other material
Pb	BL≤(700-3σ) <x <(1300+3σ)<br="">≤OL</x>	BL≤(500-3σ) <x <(1500+3σ)<br="">≤OL</x>	10 mg/kg	50 mg/kg
Cd	BL≤(70-3σ) <x <(130+3σ)<br="">≤OL</x>	LOD≤(50-3σ) <x <(150+3σ)<br="">≤OL</x>	10 mg/kg	50 mg/kg
Hg	BL≤(700-3σ) <x <(1300+3σ)<br="">≤OL</x>	BL≤(500-3σ) <x <(1500+3σ)<br="">≤OL</x>	10 mg/kg	50 mg/kg
Cr	BL≤(700-3σ)< X	BL≤(500-3σ)< X	10 mg/kg	50 mg/kg
Br	BL≤(300-3σ)< X	BL≤(250-3σ)< X	10 mg/kg	50 mg/kg
Note:	OCTC	BCTC		

Note:

BCT

-BL = Under the XRF screening limit

BCTC

SCIC -OL = Further chemical test will be conducted while result is above the screening limit

-X= The symbol "X" marks the region where further investigation is necessary

 -3σ = The reproducibility of analytical instruments

-LOD= Detection limit

-"--" = Not regulated.

B. Chemical Test	BCTC			
Test Item(s)	Test Method	Measured Equipment(s)	MDL	Limit
Lead (Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES	2 mg/kg	1000 mg/kg
Cadmium (Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES	2 mg/kg	100 mg/kg
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES	2 mg/kg	1000 mg/kg
	IEC 62321-7-1:2015 Ed.1.0			1000 mg/kg
Hexavalent Chromium Cr(VI)	IEC 62321-7-2:2017 Ed.1.0	UV-VIS	8 mg/kg	1000 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015 Ed.1.0	GC-MS	5 mg/kg	1000 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015 Ed.1.0	GC-MS	5 mg/kg	1000 mg/kg
Phthalates	IEC 62321-8:2017 Ed.1.0	GC-MS	50 mg/kg	1000 mg/kg

BCTC

BCIC

Lab:Shenzhen BCTC Testing Co.,Ltd.

Add:BCTC Building & 1-2F,East of B Building,pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community, Fuyong Street, Bao 'an District, Shenzhen, China Tel: (86)0755-33229357 Fax: 0755-33229357

Hotline 400 -788 -9558 www.bctc-lab.com

Test Report

No. BCTC-FYC190627012R

倍测检测 BCTC TEST

BCTC

Date: June. 27, 2019

BCTC

Page 3 of 9

BCTC

BETC

BCTC

Test Results:

BCTC

THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
BCI	C	Pb	BL	/	PASS
	White plastic	Cd	BL		
1		Hg	BL	/	
		Cr(Cr(VI))	BL	1	
		Br(PBBs&PBDEs)	BL	/	5 m 1
		Pb	BL	/	
	ACTC.	Cd	BL	/	-
2	White wire	Hg	BL		PASS
	jacket	Cr(Cr(VI))	BL	1	
	0	Br(PBBs&PBDEs)	BL	1	100
C.		Pb BC	BL	1	BL
		Cd	BL	1	1
3	Silver metal	Hg	BL	1	PASS
	D.C.I	Cr(Cr(VI))	BL	1	1
		Br(PBBs&PBDEs)	BL	P	1
		Pb	BL	1	
de		Cd	BCIC BL	/	BCI
4	Silver battery	Hg	BL	1	PASS
		Cr(Cr(VI))	BL SCI		
		Br(PBBs&PBDEs)	BL	/	
		Pb	BL	/ 80	10
	-	Cd	BL	/	PASS
5	Yellow wire	Hg	BCBL	/	
BC		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	ACTC/	
	^b	Pb	BL	1	
1	-	Cd	BL	/	BCTC
6	Red wire	Hg BC M	BL	/	PASS
		Cr(Cr(VI))	BL	/	
	BCTC	Br(PBBs&PBDEs)	BL	1	
	0-	BCTC		BCTC	
		0			
BCTC		B	CTC		BCT
			BCT	C	
:Shenzhe	n BCTC Testing Co	o.,Ltd.	Dr.		

BCTC

BCTC

Lab:Shenzhen BCTC Testing Co.,Ltd.

Hotline 400 -788 -9558 www.bctc-lab.com



BCTC

THIS DOCUMENT WAS REDACTED WITH THE PRODUCTIP REDACTION TOOL ON 2019-08-27. AT THE TIME OF GENERATING THE DOCUMENT THE ORIGINAL DOCUMENT WAS AVAILABLE ALSO. THE ORIGINAL CAN ONLY BE MADE AVAILABLE BY THE DOCUMENT OWNER.

BCTC **Test Report**

No. BCTC-FYC190627012R

Date: June. 27, 2019

BCTC

Page 4 of 9

BCTC

	Br.	Pb	BL	1	
		Cd	BL	/	
7	Green pcb	Hg	BL	/	PASS
20	TC	Cr(Cr(VI))	BL	/	17,00
83		Br(PBBs&PBDEs)	/	1	
	BCT	Pb	BL	1	
	De.	Cd	BL	/	
8	IC	Hg	BL	/	PASS
•		Cr(Cr(VI))	BL	1	
	arts.	Br(PBBs&PBDEs)	BGIG	/	
	Dre	Pb	BL	- It C	
		Cd	BL	BCIC	
9	Silver connector	Hg	BL		PASS
20		Cr(Cr(VI))	BL	/	BCIL
1.00		Br(PBBs&PBDEs)	BL	/	
	DITE	Pb	BLBCTC	/	
	Led	Cd	BL	1	
10		Hg	BL	BEI	PASS
		Cr(Cr(VI))	BL	1	
1		Br(PBBs&PBDEs)	BCIE	/	BC
Ber		Pb	BL	1	
		Cd	BL S		
11	Capacitance	Hg	BL	/	PASS
		Cr(Cr(VI))	BL	/ 8	CIC
		Br(PBBs&PBDEs)	/	/	
		Pb	BL	/	
9	CIL	Cd	BL	1	
12	Resistance	Hg	BL	8019	PASS
		Cr(Cr(VI))	BL	1	
1		Br(PBBs&PBDEs)	1	/	BCTC
10		Pb BC1	BL	/	
		Cd	BL BCTC	1	
13	Switch	Hg	BL	/	PASS
		Cr(Cr(VI))	BL	PLATC	
		Br(PBBs&PBDEs)		1	

Lab:Shenzhen BCTC Testing Co.,Ltd.

Add:BCTC Building & 1-2F,East of B Building,pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community, Fuyong Street, Bao 'an District, Shenzhen, China Tel: (86)0755-33229357 Fax: 0755-33229357



BETC

BCTS

Test Report

No. BCTC-FYC190627012R

BCTC

Date: June. 27, 2019

BCTC

Page 5 of 9

BCTC

STOR

BCTC

BCTC

BCTC

BCTC

400 -788 -9558

www.bctc-lab.com

RCT

Tested Item(s)		Results Unit (mg/kg)		
DITE.		1+2	BCI	
Di-isobutyl phthalate(DIBP)		ND		
CAS #:84-69-5		N.D.		
Dibutyl phthalate(DBP)		ND		
CAS #:84-74-2	RCTC	N.D.	BETC	
Benzylbutyl phthalate(BBP)		N.D.	\$~~~	
CAS #:85-68-7		N.D.		
Bis(2-ethyl(hexyl) phthalate)(DEHP)		ND		
CAS #:117-81-7	N.D.			

Note:

ICTC

-MDL = Method Detection Limit

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

-mg/kg = ppm = parts per million

-" / "= Not conducted.

-Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than $0.1\mu g/cm^2$ with $50cm^2$ sample surface area used.

BETC

BCIC

BETC

BCIC

BETC

BCTC

BCTC

-Positive = Presence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is equal to or greater than $0.13\mu g/cm^2$ with $50cm^2$ sample surface area used.

Remark:

BCTC

BCTC

BCTC

- The screening results are only used for reference.

BCTC

BCTC

- When conducting the test for PBBs&PBDEs, XRF was introduced to screen Br Exclusively; When conducting the test for Hexavalent Chromium, XRF was introduced to screen Chromium exclusively.

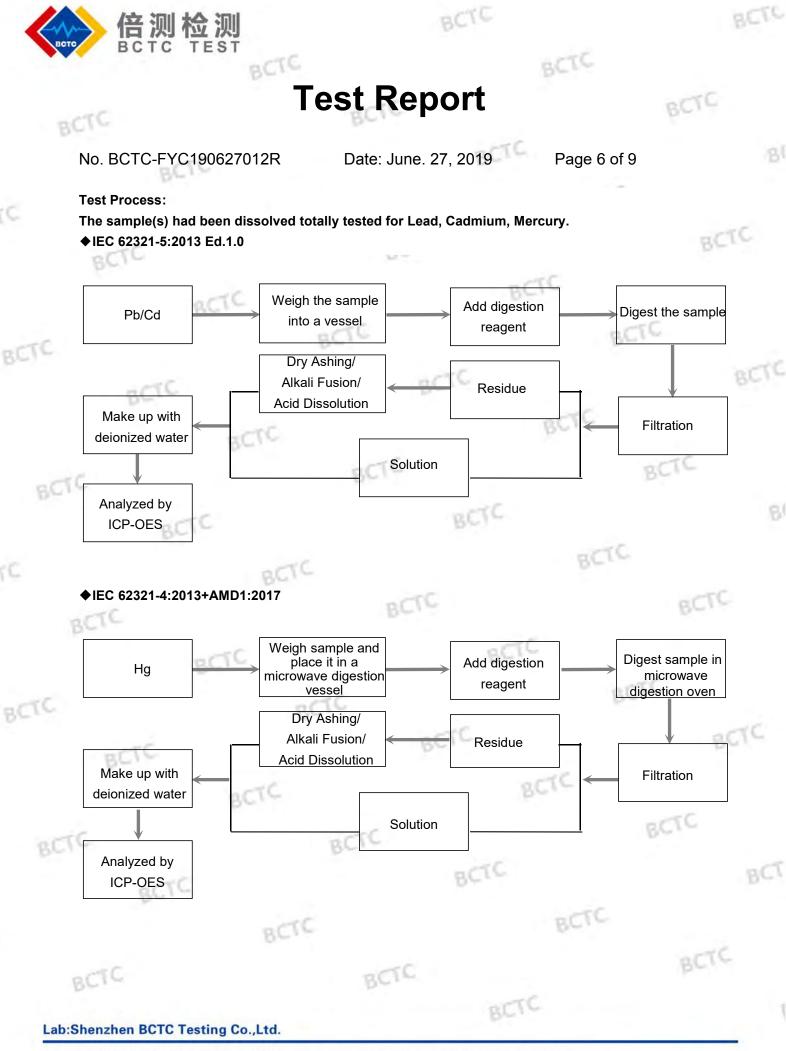
RCTC

BCTC

Lab:Shenzhen BCTC Testing Co.,Ltd.

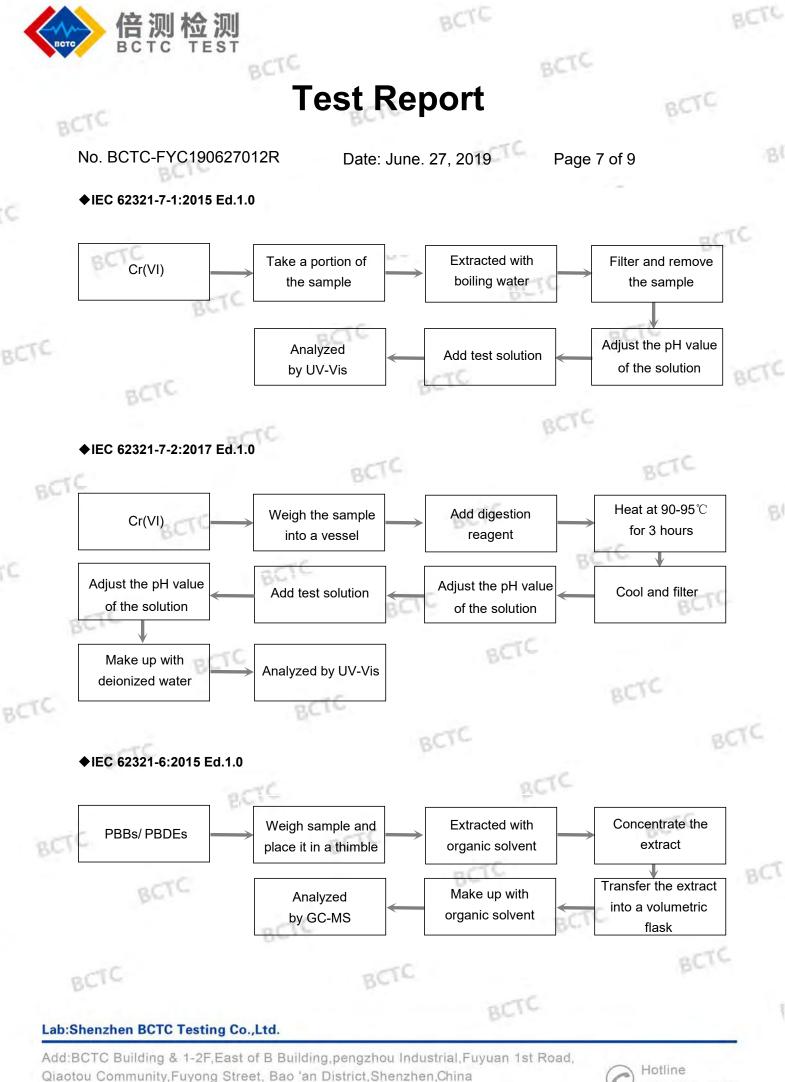
BCTC

Add:BCTC Building & 1-2F,East of B Building,pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community,Fuyong Street, Bao 'an District,Shenzhen,China Tel : (86)0755-33229357 Fax : 0755-33229357



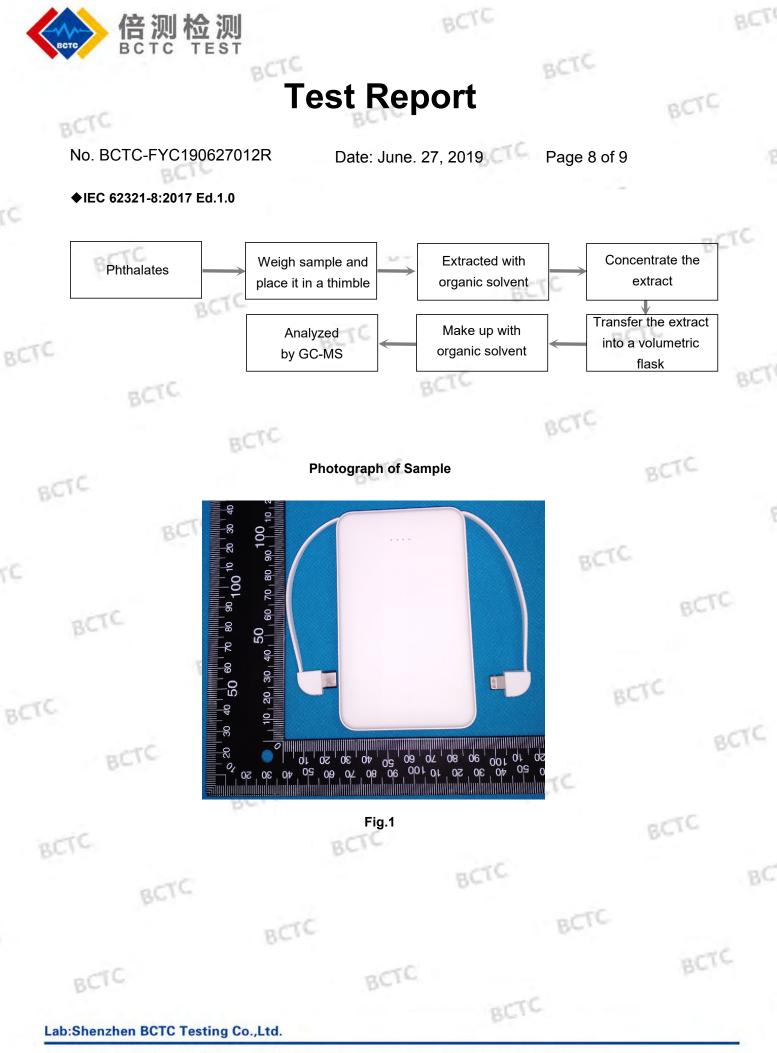
Add:BCTC Building & 1-2F,East of B Building,pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community,Fuyong Street, Bao 'an District,Shenzhen,China Tel : (86)0755-33229357 Fax : 0755-33229357

Hotline 400 -788 -9558 www.bctc-lab.com



Tel : (86)0755-33229357 Fax : 0755-33229357

400 -788 -9558 www.bctc-lab.com



BE MAI

Add:BCTC Building & 1-2F,East of B Building,pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community,Fuyong Street, Bao 'an District,Shenzhen,China Tel : (86)0755-33229357 Fax : 0755-33229357

Hotline 400 -788 -9558 www.bctc-lab.com



BCTC

Test Report

No. BCTC-FYC190627012R

Date: June. 27, 2019 Page 9 of 9

BCTC

BETC

BETC

BETC

BCTC

BCTC

BCTC

BCTC

BCT

BCTC

BCTC

BET

Photo(s) of the tested component(s)



Fig.2

BCTC



Fig.3

BCTC

BCTC ******

The test report is effective only with both signature and the special stamp for inspection and testing. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of BCTC, this report can't be reproduced except in full.

Lab:Shenzhen BCTC Testing Co.,Ltd.

BCTC

Add:BCTC Building & 1-2F,East of B Building,pengzhou Industrial,Fuyuan 1st Road, Qiaotou Community, Fuyong Street, Bao 'an District, Shenzhen, China Tel: (86)0755-33229357 Fax: 0755-33229357

