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Applicant: Shenzhen Soshine Battery Co., Ltd.

Address : 4F East, Xinyuke Complex Building, Ronghongtai Property

Management, Langkou Industrial Park, Dalang St., Longhua Dist.,

Shenzhen 518109, P.R. China

The submitted sample and sample information was/were submitted and identified by/on the behalf

of the client

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Sample name : Soshine LiFePo4 battery 15266 (IFR CR2) 3.2V 300mAh

Type /model : CR2-3.2-300

Trademark : Call

Manufacturer : Shenzhen Soshine Battery Co., Ltd.

Address : 4F East, Xinyuke Complex Building, Ronghongtai Property

Management, Langkou Industrial Park, Dalang St., Longhua Dist.,

Shenzhen 518109, P.R. China

Sample received date : Sep. 07, 2017

Testing period : Sep. 07, 2017 - Sep. 14, 2017

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 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.

According to the RoHS Directive 2011/65/EU

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

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Tested by

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Judy Zon

BCTC TEST Approved by

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Lab: Shenzhen BCTC Testing Co., Ltd.

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

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Test Method:

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A. Screening test by XRF spectroscopy

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

	BCTC	Limit of IEC 62321-3	MDL		
	Element	Polymers and metals	Composite material	Polymers	Other material
rc BCT	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)<="" td=""><td>LOD≤(50-3σ)<x <(150+3σ)<br="">≤OL</x></td><td>10 mg/kg</td><td>50 mg/kg</td></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
	C Br	BL≤(300-3σ)< X	BL≤(250-3σ)< X	10 mg/kg	50 mg/kg

Note:

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- BCTC -BL = Under the XRF screening limit
- -OL = Further chemical test will be conducted while result is above the screening limit
 -X= The symbol "X" marks the residual.
- -X= The symbol "X" marks the region where further investigation is necessary
- -3σ= The reproducibility of analytical instruments
- -LOD= Detection limit

B. Chemical Test

Test Item(s)	BCTCTest 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 Ed.1.0	ICP-OES	2 mg/kg	1000 mg/kg
Llovavalant Chromium Cr/(/I)	IEC 62321-7-1:2015 Ed.1.0	UV-VIS	/ B	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
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Test Results:

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	rest Results:		-CTC		BCTL	
TC	Sample	Sample	Tagted Home	XRF Screening Test	Chemical Test	Canalysian
, "	No.	Description	Tested Items	Unit (mg/kg)	Unit (mg/kg)	Conclusion
	BC	TC	Pb	BL	1	Do
		White-blue	Cd	BL	-TC /	
	1	plastic paper	Hg	BL	1	PASS
		plastic paper	Cr(Cr(VI))	BL	1	·C
BCTO	j.		Br(PBBs&PBDEs)	BL	1 BC	
BC.			Pb	BL	1	4
		Silver metal	Cd	BCBL	1	١
	2	shell	Hg	BL	actt	PASS
		Silcii	Cr(Cr(VI))	BL	BC.	
		-	Br(PBBs&PBDEs)	- 1	1	-cTC
D	CTC		Pb BC	BL	1	BCIO
D			Cd	BL	1	
	3	White plastic	Hg	BBC	1	PASS
			Cr(Cr(VI))	BL	LOTC	
TC			Br(PBBs&PBDEs)	BL	BC1.	
, -			Pb	BL	1	-CTC
	PCTC	p .	Cd	BC16 BL	1	BCIO
	4	Black plastic	Hg	BL	1	PASS
		BCT	Cr(Cr(VI))	BL BCI	1	
			Br(PBBs&PBDEs)	BL	1	r C
BCTC			Pb-C	BL	1 BC	
DC.			Cd	BL	1	
	5	White plastic	Hg	BBL	1	PASS BC
	B		Cr(Cr(VI))	BL	1	
			Br(PBBs&PBDEs)	BL	BCIC 1	
		1	Pb	BL	1	-CTC
	CTC		Cd CTC	BL	1	BCIO
B	6	Silver metal	Hg	BL	1	PASS
		BCTC	Cr(Cr(VI))	BBC	1	
		RCI	Br(PBBs&PBDEs)	1	1	

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		BC.				
			Pb	BL	ACTC	
TC		Transparent	Cd	BL	7	
	7	Transparent plastic	Hg	BL BL	1	PASS
	BC	1C plastic	Cr(Cr(VI))	BL	1	
			Br(PBBs&PBDEs)	BL	TC /	
		BCT	Pb	BL	1	
		Silver metal	Cd	BL	1 201	·C
BCTC	8	contact	Hg	BL	1	PASS
De		Contact	Cr(Cr(VI))	BL	1	1
		BCTC	Br(PBBs&PBDEs)	BCI	1	1
			Pb	BL	BCTC	
		F	CTC Cd	BL	1	
	9	Plastic paper	Hg	BL BL	1	PASS
В	CTC		Cr(Cr(VI))	BL	1	BC
			Br(PBBs&PBDEs)	BL	1	
		BCTC	Pb	BBC	1	
TC	10	Yellow plastic paper	Cd	BL	ACTC	
			Hg	BL	PC.	PASS
			Cr(Cr(VI))	BL	1	OCTC
	DOTO	6	Br(PBBs&PBDEs)	BL	1	BCI

Note:

- -MDL = Method Detection Limit
- -N.D. = Not Detected (<MDL)
- -mg/kg = ppm = parts per million
- -Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.1 mg/kg with 50cm² sample surface area used.

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-Positive = Presence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is equal to or greater than 0.1 mg/kg with 50cm² sample surface area used.

Remark:

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- The screening results are only used for reference.
- 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.

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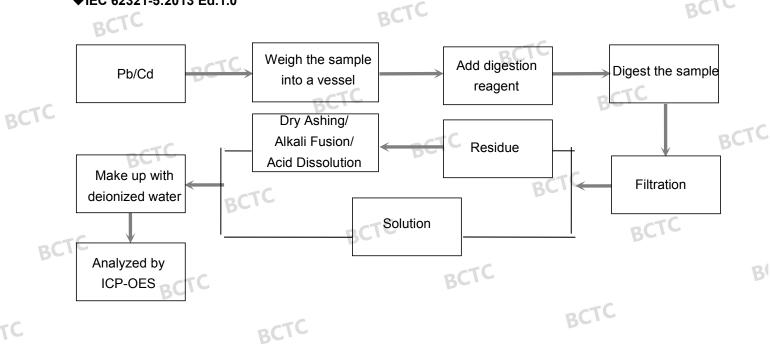
Test Process:

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

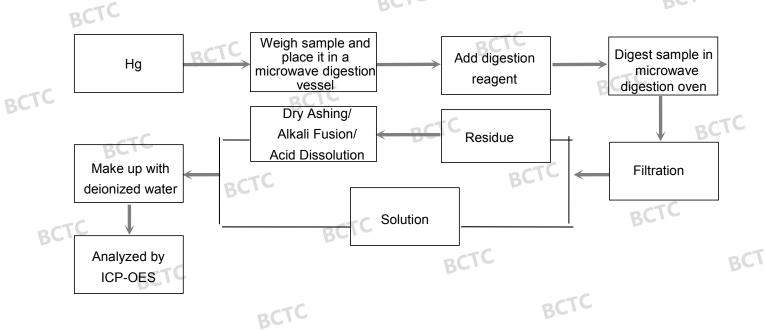
◆IEC 62321-5-2013 Ed 4.0

♦IEC 62321-5:2013 Ed.1.0



♦IEC 62321-4:2013 Ed.1.0

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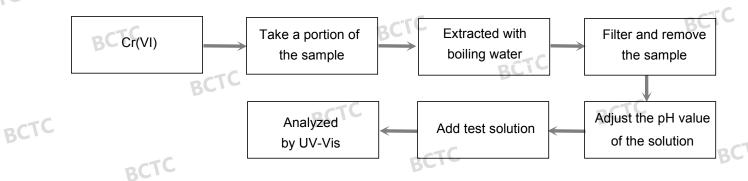
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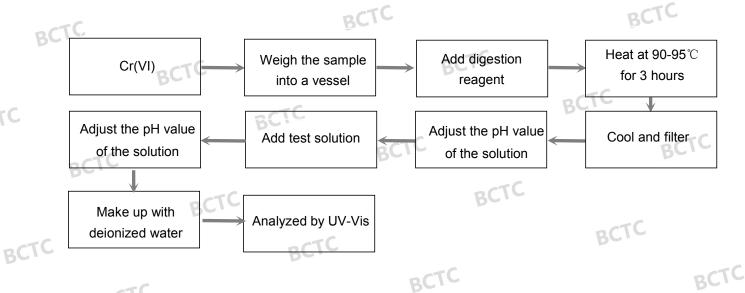
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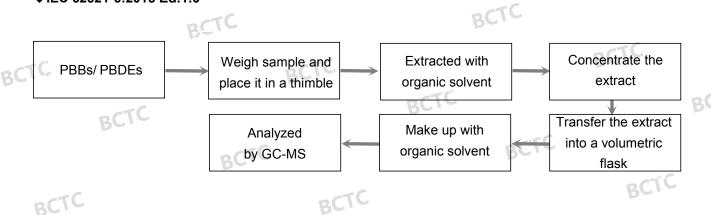
♦IEC 62321-7-1:2015 Ed.1.0



♦IEC 62321-7-2:2017 Ed.1.0



♦IEC 62321-6:2015 Ed.1.0



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Photograph of Sample

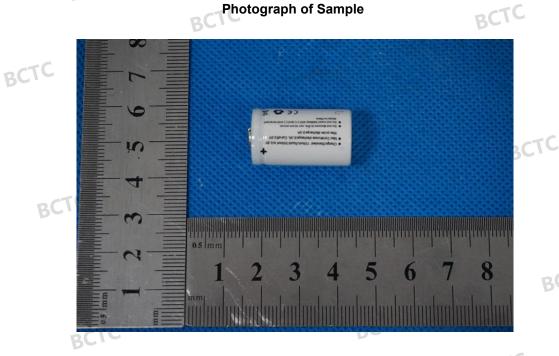


Fig. 1

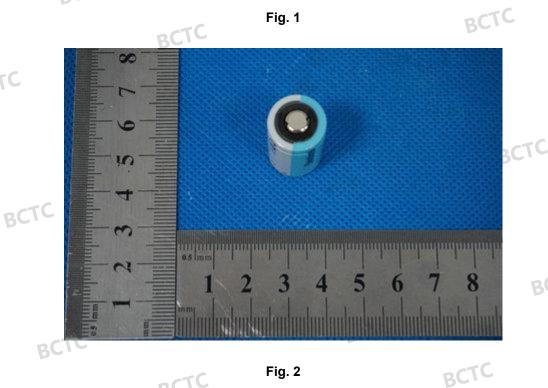


Fig. 2

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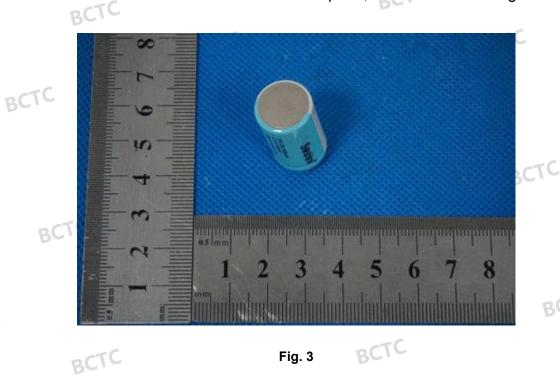


Fig. 3

Photo(s) of the tested component(s)

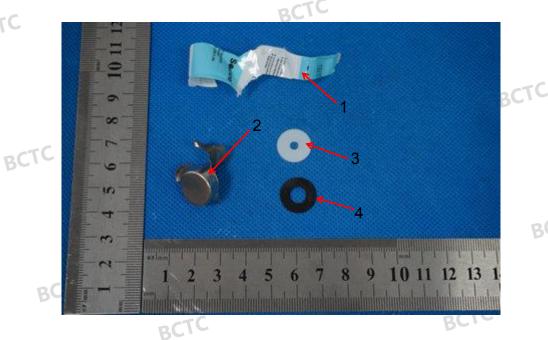


Fig. 4 BCTC

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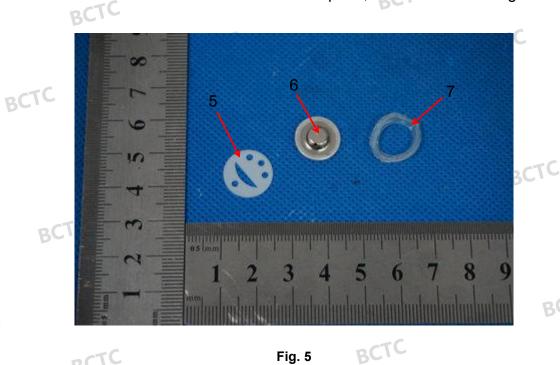


Fig. 5

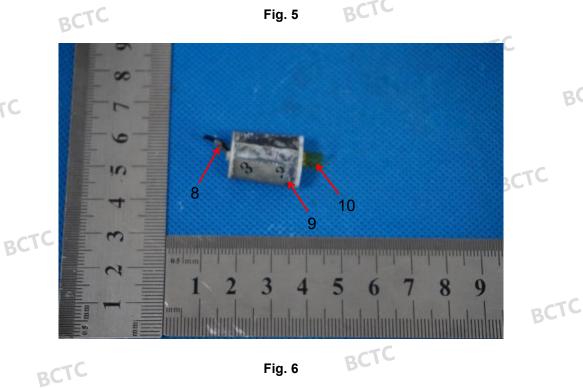


Fig. 6

End of Report

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