# **CPST**







# **Test Report**

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Applicant: SHENZHEN LIDEA BATTERY CO., LTD.

申请公司: 深圳市力电电池有限公司

Applicant Address: 3/F, No.5 Bldg., Houhai xufa Tech. Park, No.8 Zhengxing Rd., Loucun, Gongming,

Shenzhen, China

申请公司地址: 深圳市光明新区公明楼村后海旭发科技园五栋三楼

The following samples were submitted and identified on behalf of the clients as

以下测试之样品是由申请者所提供及确认

Sample Name: 3.6V Button rechargeable lithium-ion battery

样品名称: 3.6V扣式可充锂离子电池

Main Test Model: LIR2032 主测型号: LIR2032

Model Reference: LIR920/LIR927/LIR1025/LIR1040/LIR1054/LIR1220/LIR1240/LIR1254/ 报备型号: LIR1454/LIR1616/LIR1620/LIR1632/LIR1654/LIR2016/LIR2025/LIR2050/

LIR2330/LIR2425/LIR2430/LIR2450/LIR2477/LIR3048

E-MEINON品牌电池: LIR2032/LIR2025

 CPST Internal Reference No.:
 C191223063

 CPST 参考编号:
 C191223063

 Date of Sample Received:
 Dec 23, 2019

 收样日期:
 2019年12月23日

Testing Period: Dec 23, 2019 to Dec 27, 2019

测试周期: 2019年12月23日至2019年12月27日

Eurones Consumer F

Test Method: Please refer to next page(s)

测试方法: 请参见下一页

Test Result: Please refer to next page(s)

测试结果: 请参见下一页

or be alf of s Jesting Service Co., Ltd

TESTED BY:

APPROVED BY:

David Wan

Wan Da Wei, David

**Project Leader** 

Liu Xiao Fang, Sunshine Report Reviewer

Pan Jian Ding, Will Technical Supervisor

Will Pan

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**CONCLUSION:** 

结论:

TESTED SAMPLES TEST ITEM RESULT

测试样品 测试项目 结果

1.RoHS Directive 2011/65/EU Annex II amending Annex (EU)2015/863

and amending Annex (EU)2017/2102

1.RoHS 指令2011/65/EU附录Ⅱ的修正指令(EU)2015/863和修正指令

3.6V Button (EU)2017/2102

rechargeable — Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs

PASS

lithium-ion battery and PBDEs Content 合格

3.6V扣式可充锂离子 —铅、汞、镉、六价铬、多溴联苯和多溴联苯醚含量 电池 —Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP)

电池 —Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP),
Dibutyl phthalate (DBP), Diisobutyl phthalate(DIBP) Content PASS

邻苯二甲酸二丁酯(DBP)、邻苯二甲酸二异丁酯(DIBP)含量



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#### **Photo of the Submitted Sample**

送检样品照片







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Test Result(s):

测试结果:

Description of Specimen : 3.6V Button rechargeable lithium-ion battery

样品描述 : 3.6V扣式可充锂离子电池

1. Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs—RoHS Directive 2011/65/EU

Annex II amending Annex (EU)2015/863 and amending Annex (EU)2017/2102

1.铅、汞、镉、六价铬、多溴联苯和多溴联苯醚含量—RoHS 指令 2011/65/EU 附录Ⅱ 的修正指令(EU)2015/863 和修正指令(EU)2017/2102

Test Items 测试项目	Unit 单位	Test Method 测试方法	Result 结果	MDL 检出限	Limit 限值
Lead (Pb)/铅	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	2	1000
Mercury (Hg)/汞	mg/kg	IEC 62321-4:2013+A1:2017, ICP-OES		2	1000
Cadmium(Cd)/镉	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	2	100
Hexavalent Chromium (CrVI)/六价铬	mg/kg	IEC 62321-7-2:2017, UV-VIS N.D.		2	1000
Monobromobiphenyl/一溴联苯	mg/kg	IEC 62321-6:2015, GC-MS N.D.		5	ے - ا
Dibromobiphenyl/二溴联苯	mg/kg	IEC 62321-6:2015, GC-MS N.D.		5	\-\ \
Tribromobiphenyl/三溴联苯	mg/kg	IEC 62321-6:2015, GC-MS N.D.		5	5:
Tetrabromobiphenyl/四溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-6
Pentabromobiphenyl/五溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	CS.
Hexabromobiphenyl/六溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	· .
Heptabromobiphenyl/七溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	- G
Octabromobiphenyl/八溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	<u></u>
Nonabromobiphenyl/九溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	- <sub>-</sub>
Decabromobiphenyl/十溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	200
Sum of PBBs/多溴联苯总和	mg/kg	25 - CY - C	N.D.	9 °-	1000
Monobromodiphenyl ether/一溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-8
Dibromodiphenyl ether/二溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	X -0
Tribromodiphenyl ether/三溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	b`-
Tetrabromodiphenyl ether/四溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Pentabromodiphenyl ether/五溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	165
Hexabromodiphenyl ether/六溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	- ^9
Heptabromodiphenyl ether/七溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	GX
Octabromodiphenyl ether/八溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	< - ,
Nonabromodiphenyl ether/九溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	, - (
Decabromodiphenyl ether/十溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	26-)
Sum of PBDEs/多溴联苯醚总和	mg/kg	-6) -13 x	N.D.	- (	1000





# **Test Report**

测试报告

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Note:

注释:

- mg/kg = milligram per kilogram= ppm
- 2. N.D. = Not Detected (<MDL)
- 3. MDL = Method detection limit
- 4. "-" = Not Regulated

- 1. mg/kg =毫克每千克= ppm
- 2. N.D. = 未检出 (< MDL)
- 3. MDL = 方法检测限
- 4. "-" = 未规定

-Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate(DIBP) Content—RoHS Directive 2011/65/EU Annex II amending Annex (EU)2015/863 and amending Annex (EU)2017/2102

<u>-邻苯二甲酸二(2-乙基己基)酯(DEHP)、邻苯二甲酸苯基丁酯(BBP)、邻苯二甲酸二丁酯(DBP)、邻苯二甲酸二异丁酯(DIBP)含量— RoHS 指令2011/65/EU附录Ⅱ的修正指令(EU)2015/863和修正指令(EU)2017/2102</u>

Test method: With reference to IEC 62321-8:2017, analysis was performed by Gas Chromatograph-Mass Spectrometer (GC-MS).

测试方法:参考 IEC 62321-8:2017,使用气相色谱质谱联用仪(GC-MS)进行分析。

Test Items 测试项目	Unit 单位	Result 结果	MDL 检出限	Limit 限值	
Di-(2-ethylhexyl) phthalate (DEHP) 邻苯二甲酸二(2-乙基己基)酯(DEHP)	mg/kg	N.D.	50	1000	
Benzylbutyl phthalate (BBP) 邻苯二甲酸苯基丁酯(BBP)	mg/kg	N.D.	50	1000	
Dibutyl phthalate (DBP) 邻苯二甲酸二丁酯(DBP)	mg/kg	N.D.	50	1000	
Diisobutyl phthalate(DIBP) 邻苯二甲酸二异丁酯(DIBP)	mg/kg	N.D.	50	1000	

Note:

注释:

- 1. mg/kg = milligram per kilogram= ppm
- 2. N.D. = Not Detected (<MDL)
- 3. MDL = Method detection limit

- 1. mg/kg =毫克每千克= ppm
- 2. N.D. = 未检出 (< MDL)
- 3. MDL = 方法检测限

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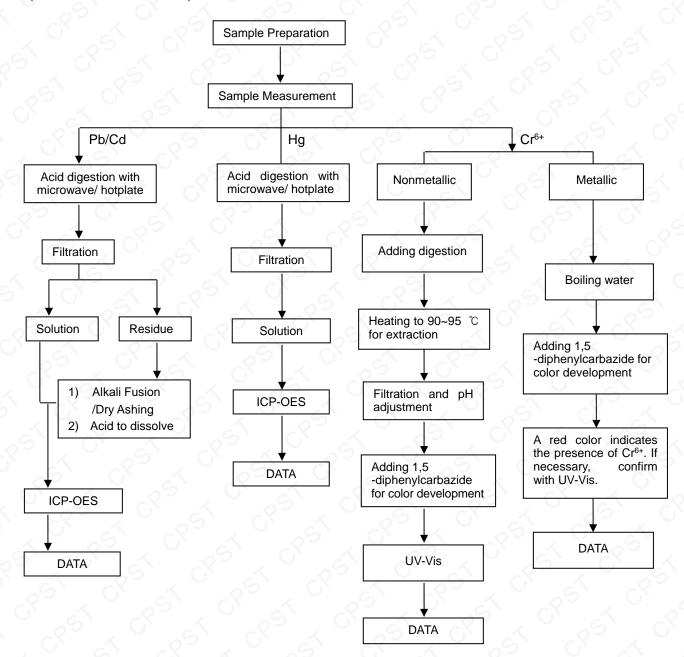
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#### Pb/Cd/Hg/Cr6+ Testing Flow Chart

 These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)



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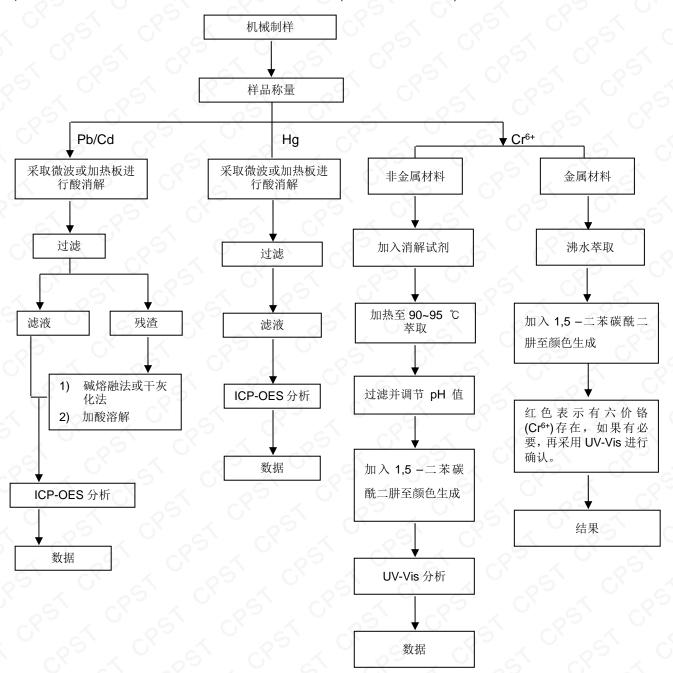
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#### Pb/Cd/Hg/Cr6+ 测试流程图

1) 根椐以下测试流程图样品在预处理方法中被完全溶解(Cr<sup>6+</sup> 测试方法除外)。

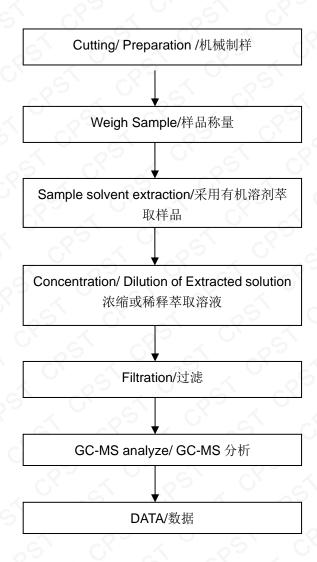




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# PBBs/PBDEs Testing Flow Chart 多溴联苯/多溴联苯醚 测试流程图



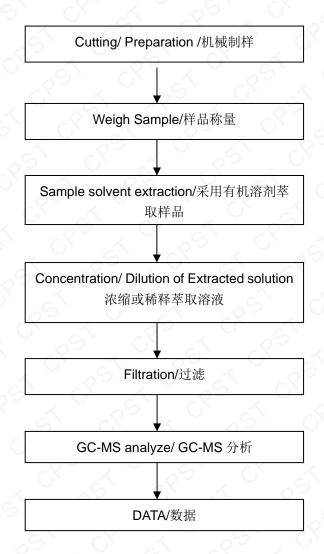


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#### **Phthalates Testing Flow Chart**

邻苯二甲酸酯 测试流程图



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

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