

Test Report
测试报告No. C191223063001
编号: C191223063001Date: Dec 27, 2019
日期: 2019年12月27日Page 1 of 9
第1页,共9页

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前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: 3V Button Non-rechargeable lithium metal batteries
样品名称: 3V 扣式不可充锂金属电池

Main Test Model: CR2032
主测型号: CR2032

Model Reference: CR920/CR927/CR1025/CR1040/CR1054/CR1220/CR1240/CR1254/
报备型号: CR1454/CR1616/CR1620/CR1632/CR1654/CR2016/CR2025/CR2050/
CR2325/CR2330/CR2354/CR2425/CR2430/CR2450/CR2477/CR3032
E-MEINON品牌电池: CR2032/CR2050/CR2450/CR2477

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

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

Signed for and on behalf of

Euron Consumer Products Testing Service Co., Ltd

TESTED BY :

Wan Da Wei, David
Project Leader

REVIEWED BY:

Liu Xiao Fang, Sunshine
Report Reviewer

APPROVED BY:

Pan Jian Ding, Will
Technical Supervisor

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



400 111 6218

Euron (Dongguan) Consumer Products Testing Service Co., Ltd.

Room 1092, No.12, East Houjie Avenue, Houjie, Dongguan, Guangdong, China.

t (86-769) 38937858

f (86-769) 38937859

Http:// www.cpstlab.com

Postcode: 523945

service@cpstlab.com



Date: Dec 27, 2019
日期: 2019年12月27日

Page 2 of 9
第2页,共9页

结 论:

TEST ITEM

RESULT

测试项目

结果

1.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

Non-rechargeable

lithium metal

batteries

3V 扣式不可充锂金

属电池

— Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs Content

—铅、汞、镉、六价铬、多溴联苯和多溴联苯醚含量

—Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP).

Dibutyl phthalate (DBP), Diisobutyl phthalate(DIBP) Content

—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

PASS

合格

PASS

合格

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



400 111 6218

Eurones (Dongguan) Consumer Products Testing Service Co., Ltd.

Room 1092, No.12, East Houjie Avenue, Houjie, Dongguan, Guangdong, China.

t (86-769) 38937858

f (86-769) 38937859

[Http:// www.cpostlab.com](http://www.cpostlab.com)

Postcode: 523945

service@cpstlab.com

Photo of the Submitted Sample

送检样品照片



This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



Test Report

测试报告

No. C191223063001
编号: C191223063001Date: Dec 27, 2019
日期: 2019年12月27日Page 4 of 9
第4页,共9页

Test Result(s):

测试结果:

Description of Specimen : 3V Button Non-rechargeable lithium metal batteries
样品描述 : 3V 扣式不可充锂金属电池**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	N.D.	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	-
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	-
Tetrabromobiphenyl/四溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Pentabromobiphenyl/五溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
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	-
Octabromobiphenyl/八溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Nonabromobiphenyl/九溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Decabromobiphenyl/十溴联苯	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Sum of PBBs/多溴联苯总和	mg/kg	-	N.D.	-	1000
Monobromodiphenyl ether/一溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Dibromodiphenyl ether/二溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Tribromodiphenyl ether/三溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
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	-
Hexabromodiphenyl ether/六溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
Heptabromodiphenyl ether/七溴联苯醚	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	5	-
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	-
Sum of PBDEs/多溴联苯醚总和	mg/kg	-	N.D.	-	1000

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpslab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



400 111 6218

Euronex (Dongguan) Consumer Products Testing Service Co., Ltd.

t (86-769) 38937858

f (86-769) 38937859

Http:// www.cpslab.com

Room 1092, No.12, East Houjie Avenue, Houjie, Dongguan, Guangdong, China.

Postcode: 523945

service@cpslab.com

Test Report
测试报告No. C191223063001
编号: C191223063001Date: Dec 27, 2019
日期: 2019年12月27日Page 5 of 9
第5页,共9页

Note:

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

注释:

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

-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

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:

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

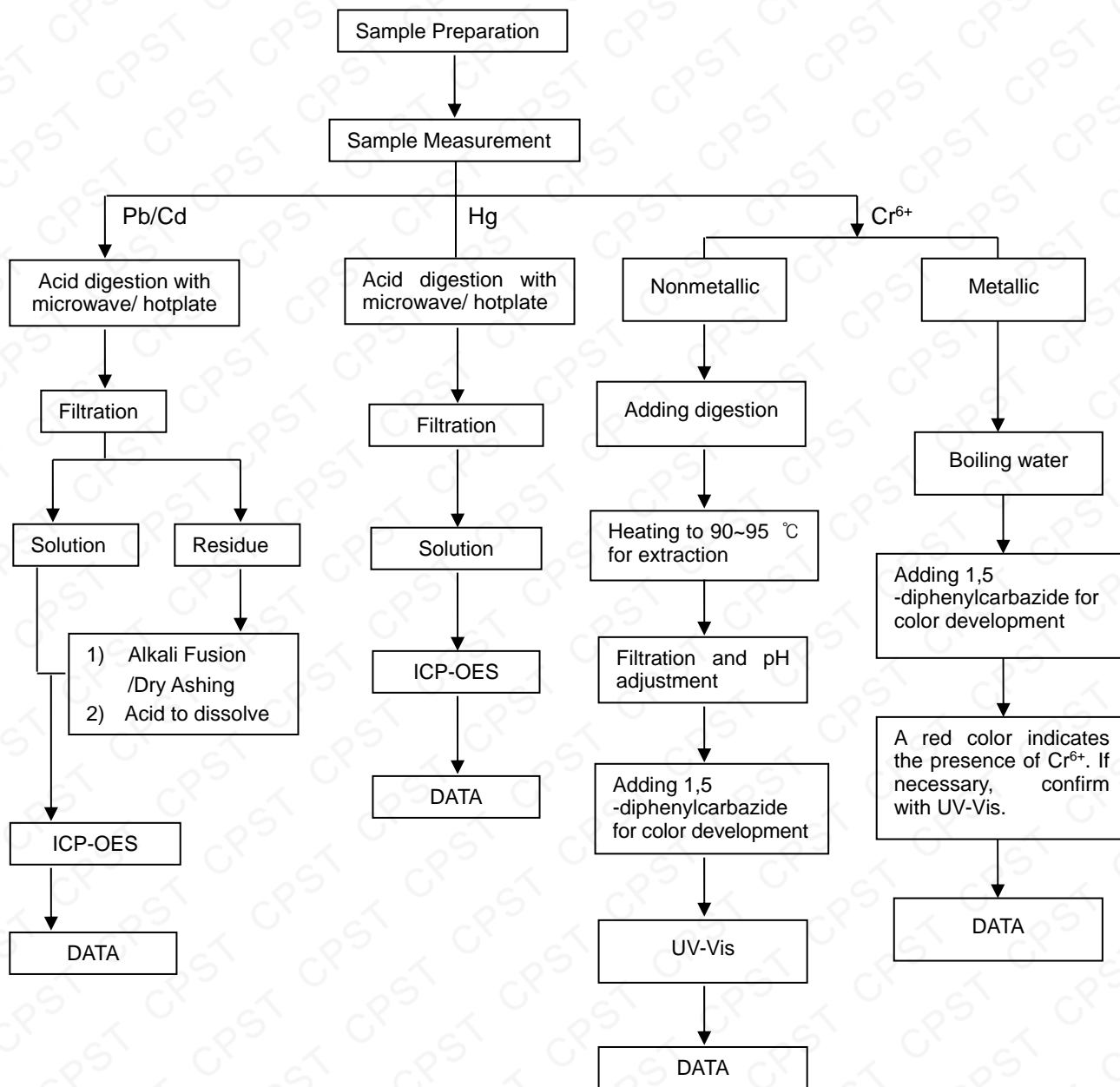
注释:

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

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.

Pb/Cd/Hg/Cr⁶⁺ Testing Flow Chart

- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr⁶⁺ test method excluded)

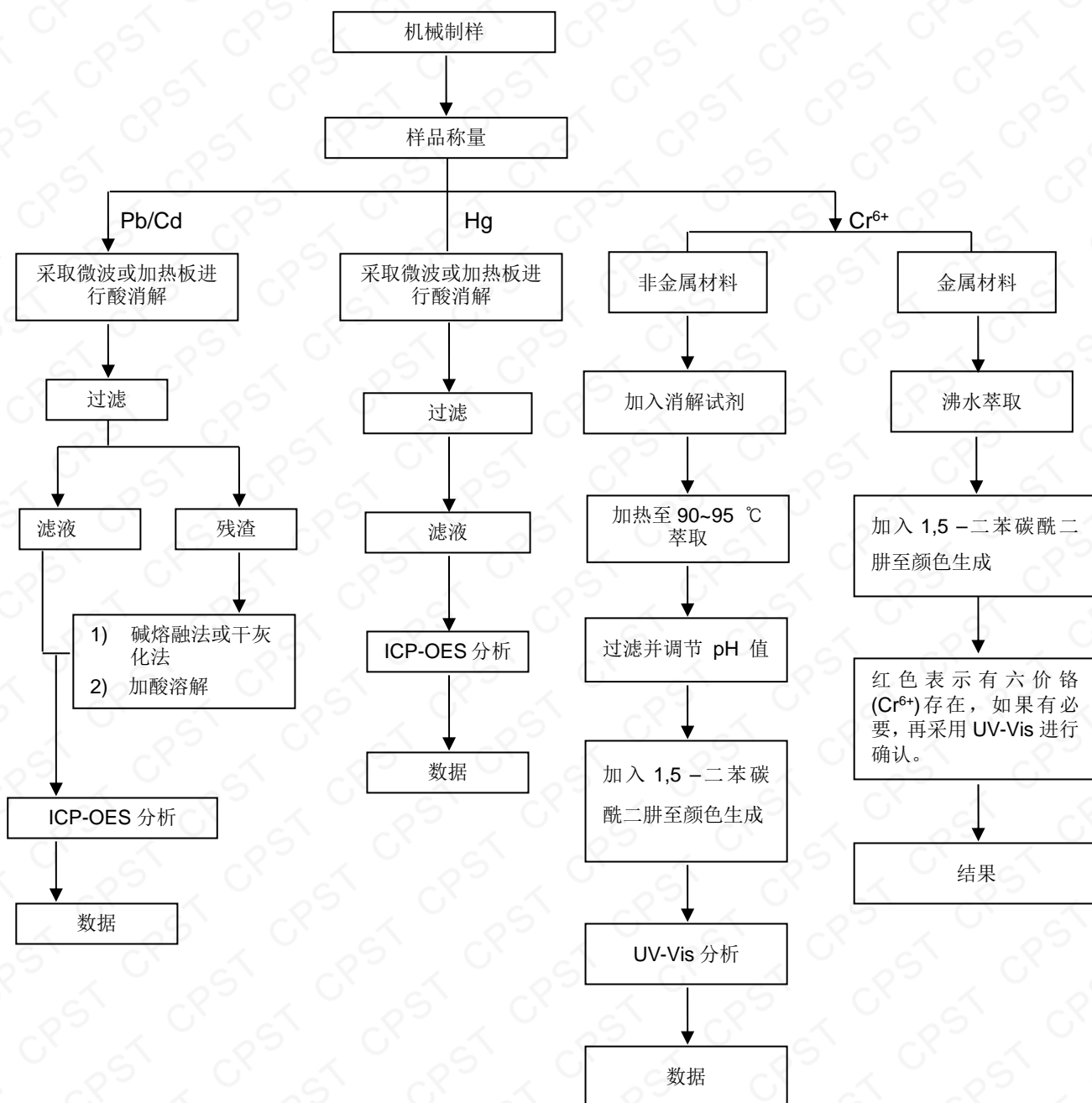


This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



Pb/Cd/Hg/Cr⁶⁺ 测试流程图

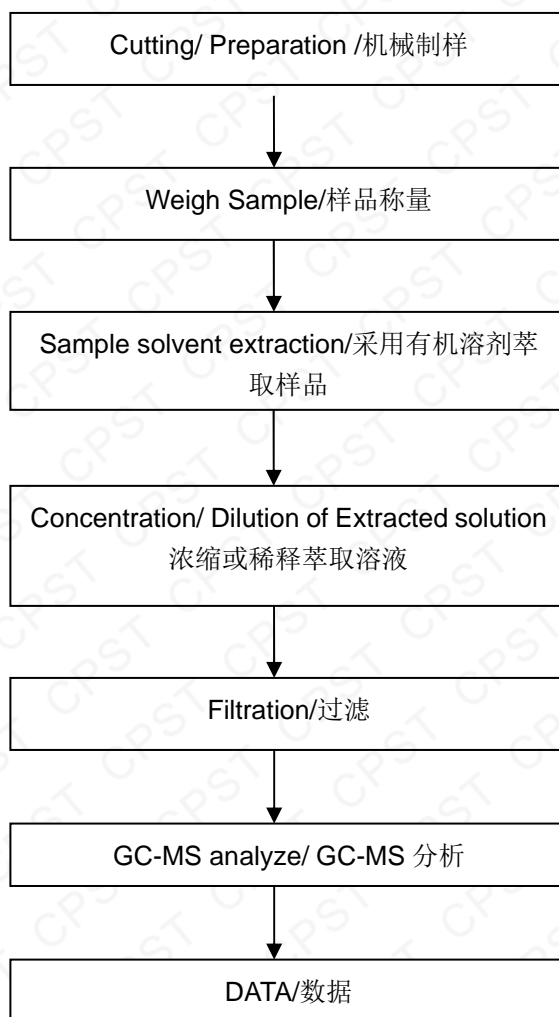
1) 根据以下测试流程图样品在预处理方法中被完全溶解(Cr⁶⁺ 测试方法除外)。



This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



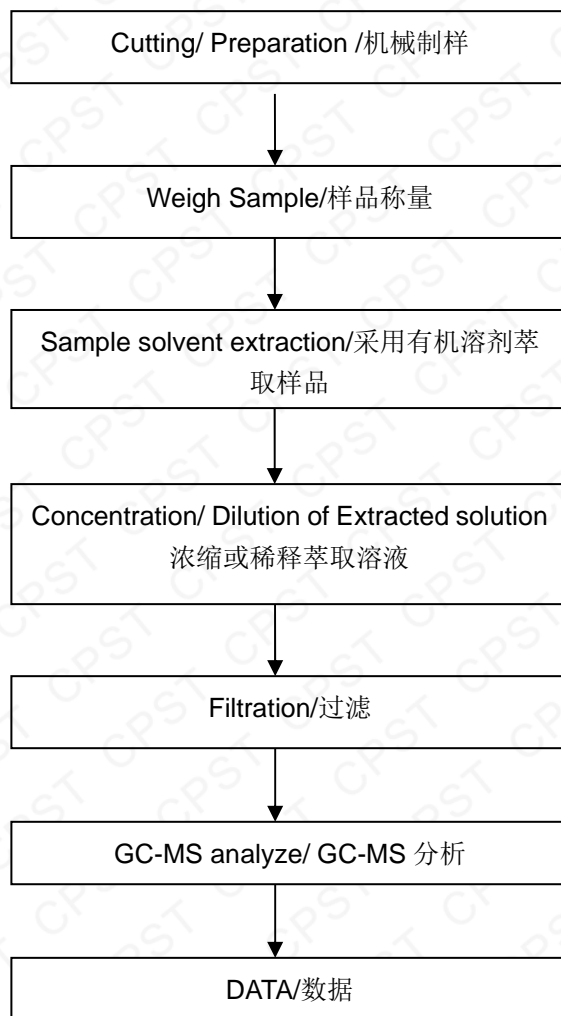
PBBs/PBDEs Testing Flow Chart
多溴联苯/多溴联苯醚 测试流程图



This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



Phthalates Testing Flow Chart
邻苯二甲酸酯 测试流程图



注: 未经本机构批准, 不得复制 (全文复制除外) 本报告。

*** End of Report ***

*** 报告结束 ***

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.cpstlab.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.

