



扫描二维码
关注谱尼测试

测试报告(Test Report) 报告编号(NO.): MOCNDTBE35358744 签发日期(Issued Date): 2020-04-01 Page 1 of 10

委托单位 Applicant: 深圳市伟科德科技有限公司
Shenzhen WECODO Technology Co.,LTD
地址 Address: 深圳市南山区南山数字文化产业基地西塔 1509
Room 1509,West Tower,Nanshan Digital Technology & Cultural Industry
Park, Nanshan district,Shenzhen

委托单位提供样品信息如下:

The following sample(s) was/were submitted and identified on behalf of the client as:
样品名称 Sample Name: 锂-亚硫酸氯电池 Lithium Thionyl Chloride Battery
样品型号 Sample Model: ER14505
制造商 Manufacturer: 伟科德 WECODO
零部件名称 Part Name: 见清单 See the List
样品描述 Sample Description: 见清单 See the List

样品接收日期 Sample Received Date: 2020-03-26
样品测试日期 Testing Period: 2020-03-26 ~ 2020-04-01

参考要求: RoHS 2011/65/EU 及修订指令(EU)2015/863 附录 II 的要求
Reference Requested: RoHS Directive 2011/65/EU & (EU)2015/863 Annex II

参考方法: 1. 拆分申请者提供的成品, 并评估样品和相关测试报告
Reference Method: Review was performed for the samples disjonted from the submitted
articles and the ralated test reports submitted by the Applicant
2. 仅对本报告照片中的样品进行下列测试分析 Tests was performed for the
samples indicated by the photos in the report.
(1) IEC 62321-3-1:2013,用 X 射线荧光分析仪器进行筛选
IEC 62321-3-1:2013,Screening by XRF Spectroscopy
(2) 化学测试方法 Wet Chemical Test Method
a. IEC 62321-7-1 Edition 1.0:2015,
用紫外-可见分光光度计测定六价格的含量
IEC 62321-7-1 Edition 1.0:2015,
Hexavalent Chromium Analysis is performed by UV-Vis
3. IEC 62321-8 Edition 1.0:2017 的方法,
用气相色谱质谱联用仪测定邻苯二甲酸酯类的含量
IEC 62321-8 Edition 1.0:2017 method,
Phthalates Analysis is performed by GC-MS

测试结果 Test Result: 请参见下页 Please refer to next page(s)

批准人 Approved by:

毛祖青



微信扫一扫, 使用小程序



小程序扫一扫, 在线验证

Code: rxxkcm



Hotline 400-819-5688
www.ponytest.com

谱尼测试集团深圳有限公司

公司地址: 深圳市南山区创业路中兴工业城 6 栋 1 层、3 层、5 层、6 层、5 栋 1 层
检测地址: 深圳市南山区创业路中兴工业城 6 栋 1 层、3 层、5 层、6 层、5 栋 1 层

电话: 0755-26050909
传真: 0755-26068336



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清单 The List:

样品编号 Sample Number	零部件名称 Part Name	样品描述 Sample Description
E35358744-1	外皮 Outer skin	蓝色胶纸 Blue adhesive tape
E35358744-2	钢壳 Steel shell	银色金属 silvery metal
E35358744-3	镍网 Nickel mesh	银色金属 silvery metal
E35358744-4	边膜 Edge mask	白色膜纸 White film
E35358744-5	顶膜 Apical membrane	白色膜纸 White film
E35358744-6	底膜 Base film	白色膜纸 White film
E35358744-7	铝带 Aluminum strip	银色金属 silvery metal
E35358744-8	盖组 Cover group	银色金属 silvery metal



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测试结果 Test Result (Unit: mg/kg)

样品编号 Sample No.	EDXRF		化学测试 Chemical Testing		
	测试项目 Test Item	结果 ⁽¹⁾ Results ⁽¹⁾	测试项目 Test Item	结果 ⁽²⁾ Result ⁽²⁾	限量 Limit
E35358744-1	Pb	N.D.	Pb	\	1000
	Cd	5.8	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	N.D.	Cr ⁶⁺	\	1000
	Br	N.D.	PBBs	\	1000
			PBDEs	\	1000
E35358744-2	Pb	96.2	Pb	\	1000
	Cd	N.D.	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	1.29×10 ⁵	Cr ⁶⁺	Negative	See Note (2) (c)
	Br	\	PBBs	\	1000
			PBDEs	\	1000
E35358744-3	Pb	23.5	Pb	\	1000
	Cd	N.D.	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	N.D.	Cr ⁶⁺	\	1000
	Br	\	PBBs	\	1000
			PBDEs	\	1000
E35358744-4	Pb	21.6	Pb	\	1000
	Cd	12.9	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	N.D.	Cr ⁶⁺	\	1000
	Br	N.D.	PBBs	\	1000
			PBDEs	\	1000
E35358744-5	Pb	18.3	Pb	\	1000
	Cd	13.3	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	N.D.	Cr ⁶⁺	\	1000
	Br	N.D.	PBBs	\	1000
			PBDEs	\	1000





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测试结果 Test Result (Unit: mg/kg)

样品编号 Sample No.	EDXRF		化学测试 Chemical Testing		
	测试项目 Test Item	结果 ⁽¹⁾ Results ⁽¹⁾	测试项目 Test Item	结果 ⁽²⁾ Result ⁽²⁾	限量 Limit
E35358744-6	Pb	N.D.	Pb	\	1000
	Cd	N.D.	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	N.D.	Cr ⁶⁺	\	1000
	Br	N.D.	PBBs	\	1000
			PBDEs	\	1000
E35358744-7	Pb	N.D.	Pb	\	1000
	Cd	N.D.	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	N.D.	Cr ⁶⁺	\	1000
	Br	\	PBBs	\	1000
			PBDEs	\	1000
E35358744-8	Pb	35.2	Pb	\	1000
	Cd	N.D.	Cd	\	100
	Hg	N.D.	Hg	\	1000
	Cr	1.48×10 ⁵	Cr ⁶⁺	Negative	See Note (2)(c)
	Br	\	PBBs	\	1000
			PBDEs	\	1000



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测试结果 Test Result (Unit: mg/kg)

样品编号 Sample No.	化学测试 Chemical Testing			
	测试项目 Test Item	方法检出限 MDL	结果 ⁽²⁾ Result ⁽²⁾	限量 Limit
E35358744-1	DEHP	50	N.D.	1000
	DBP	50	N.D.	1000
	BBP	50	N.D.	1000
	DIBP	50	N.D.	1000
E35358744-4	DEHP	50	N.D.	1000
	DBP	50	N.D.	1000
	BBP	50	N.D.	1000
	DIBP	50	N.D.	1000
E35358744-5	DEHP	50	N.D.	1000
	DBP	50	N.D.	1000
	BBP	50	N.D.	1000
	DIBP	50	N.D.	1000
E35358744-6	DEHP	50	N.D.	1000
	DBP	50	N.D.	1000
	BBP	50	N.D.	1000
	DIBP	50	N.D.	1000





备注 Remark:

- (1) (a)结果显示的是总 Br 含量,而限用物质是 PBBs/PBDEs;结果显示的是总 Cr 含量,而限用物质是 Cr⁶⁺.
It is the result on total Br while test item on restricted substances is PBBs/PBDEs.It is the result on total Cr while test item on restricted substances is Cr⁶⁺.
- (b)EDXRF 所得的测试结果只作初步筛选, 如果 XRF 结果超出 IEC 62321-3-1:2013 所规定的警戒范围, 我们建议客户用更精确的化学测试方法测试样品. (单位 mg/kg)
Results are obtained by EDXRF for primary screening,and further chemical testing, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013 (unit:mg/kg)

元素 Element	聚合物 Polymer	金属 Metal	复合材料 Composite Materials
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	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

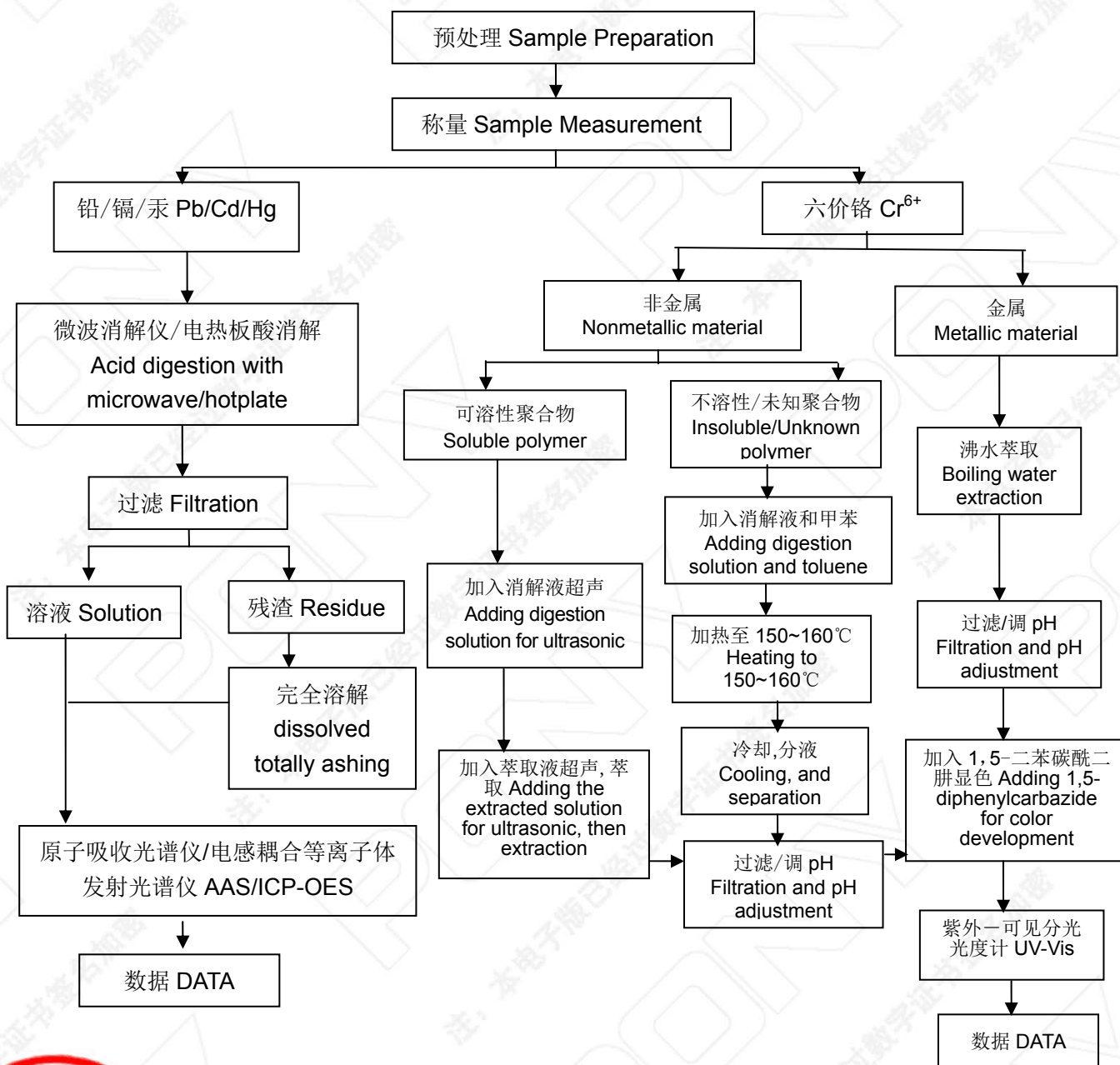
- (c) BL=低于限度, OL=超出限度, IN=不确定, LOD=测试极限值
BL=Below Limit, OL=Over Limit, IN=Inconclusive, LOD=Limit of Detection
- (d) 对于复合材料, XRF 筛选测试 RoHS 元素所得数据可能与样品中实际含量不同。
The XRF screening test for RoHs elements-The reading may be different to the actual content in the sample be of non-uniformity composition
- (2) (a) mg/kg=ppm=0.0001%, N.D.=未检出 (低于方法检出限), —=未测试, \=无要求。
mg/kg=ppm=0.0001%, N.D.= not detected(<MDL), —= not conducted,\= not available.
- (b) 由于未获知样品的存储条件和生产日期, 样品的六价铬测试结果仅能代表测试时样品含六价铬的状态。
Storage conditions and production date of the tested sample are unavailable and thus results of CrVI represent status of the sample at the time of testing.
- (c) 沸水萃取测试 Boiling water extraction test:
<0.10 $\mu\text{g}/\text{cm}^2$ 以阴性表示, 即镀层中不存在六价铬
<0.10 $\mu\text{g}/\text{cm}^2$ expressed as "negative" results, indicates without hexavalent chromium in the plating
0.10 $\mu\text{g}/\text{cm}^2$ ~0.13 $\mu\text{g}/\text{cm}^2$ 无法判定镀层中是否存在六价铬, 需进一步确定。
0.10 $\mu\text{g}/\text{cm}^2$ ~0.13 $\mu\text{g}/\text{cm}^2$ expressed as "not confirmative", indicates that it can not be confirmative for the presence of hexavalent chromium in the plating, further test is needed.
>0.13 $\mu\text{g}/\text{cm}^2$ 以阳性表示, 即镀层中存在六价铬。
>0.13 $\mu\text{g}/\text{cm}^2$ expressed as "positive", indicates that hexavalent chromium is detected in the plating.





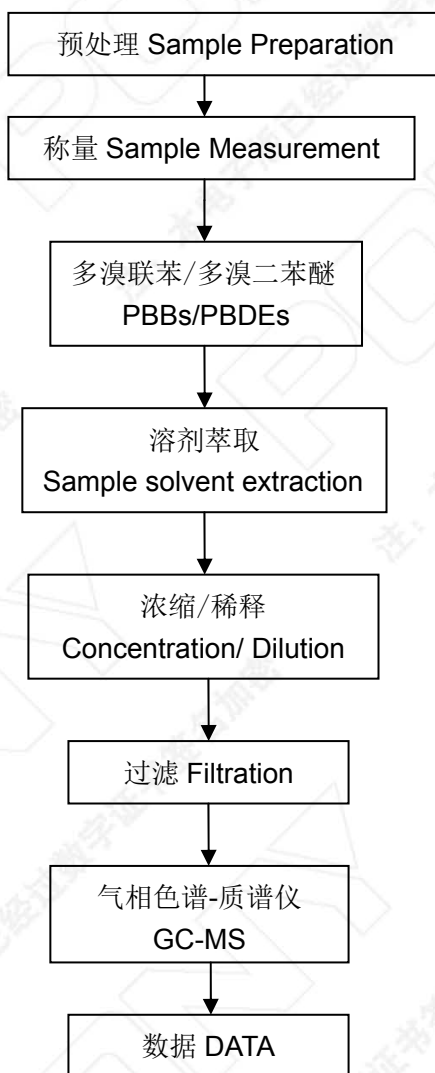
测试流程图 Measurement Flow-chart

测试人员 Tested by: 钟雅婷 审核人 Checked by: 彭平平 实验室负责人 Person in charge of the lab by: 毛祖青
 样品按照下述流程被完全消解 (六价铬除外)。
 These Samples Were Dissolved Totally By Pre-conditioning Method According To Below Flow Chart. (Cr⁶⁺ Test Method Excluded)





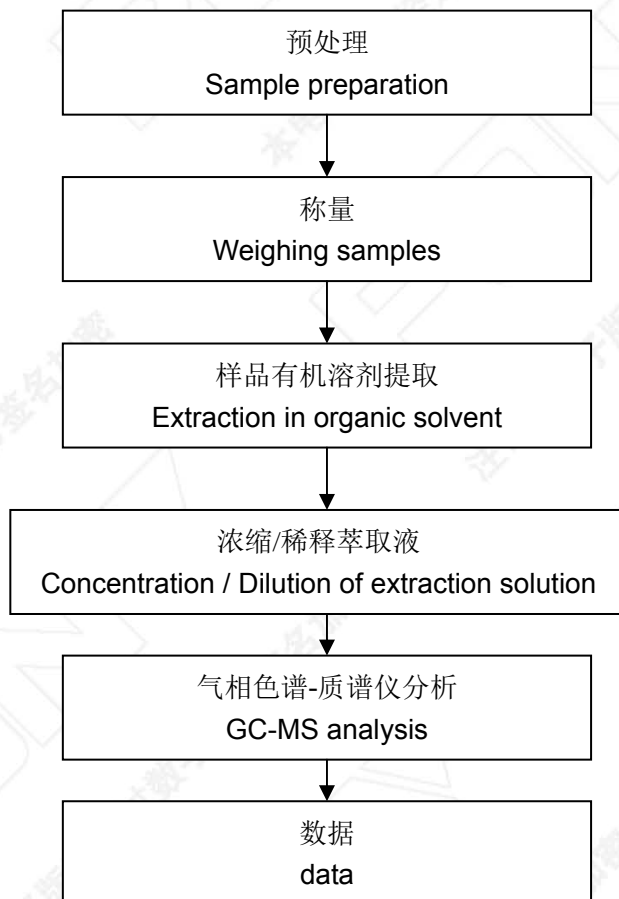
测试流程图 Measurement Flow-chart





邻苯二甲酸酯类 测试流程 Phthalates Measurement Flow-chart

测试人员 Tested By: 江月娇 审核人 Checked by: 彭平平 实验室负责人 Person in charge of the lab by: 毛祖青





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样品编号和照片 Sample No. & Photo:



E35358744-1

E35358744-2

E35358744-3

E35358744-4



E35358744-5



E35358744-6



E35358744-7



E35358744-8



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谱尼测试集团深圳有限公司

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