

检测报告 Test Report

报告编号 RLSZE00147496
Report No.RLSZE00147496

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申请单位 惠州市興利業精密電子廠有限公司 (敬業電子(惠州)有限公司)
Applicant BENNIC COMPONENTS
地 址 廣東省惠州市惠城區平南工業區 50 號小區
Address NO.50 DISTRICT, PINNAN INDUSTRIAL ZONE HUICHENG DISTRICT
HUIZHOU, GUANGDONG, CHINA

以下测试之样品及样品信息由申请者提供并确认

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

样品名称 Sample Name(s) 请参见下页 Please refer to the following page(s)
样品接收日期 2012.11.01
Sample Received Date Nov. 1, 2012
样品检测日期 2012.11.01-2012.11.05
Testing Period Nov. 1, 2012 to Nov. 5, 2012

检测要求/检测依据/检测结果 请参见下页。
Test Requested/Test Method/Test Result(s) Please refer to the following page(s).

主 检 Rick Lin 审 核 Vangar He
Tested by _____ Reviewed by _____
批 准 Danny Liu 日 期 2012.11.05
Approved by _____ Date _____
Danny Liu
Technical Manager

No. 11033122

深圳市华测检测技术股份有限公司 广东省深圳市宝安区 70 区鸿威工业园
Centre Testing International (Shenzhen) Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

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序号 No.	成品名称 Product Name	样品名称 Sample Name(s)
(1)	塑膠電容器 FILM CAPACITORS	CP 線 TIN PLATE COPPER COVERED STEEL WIRE
(2)		CU 線 TIN PLATE COPPER WIRE
(3)		錫鋅線 TIN-ZINC ALLOY WIRE
(4)		鋅線 ZINC WIRE
(5)		聚丙稀膜 METALLIZED POLYPROPYLENE FILM
(6)		黃色環氧樹脂 YELLOW EPOXY POTTING RESIN
(7)		黑色 UV 油墨 BLACK INK(UV)
(8)		白色環氧樹脂 WHITE EPOXY POTTING RESIN
(9)		塞珠 PLASTIC BEAD
(10)		銀色 UV 油墨 SILVERY INK(UV)
(11)		黑色環氧樹脂 BLACK EPOXY POTTING RESIN
(12)		白色 UV 油墨 WHITE INK(UV)
(13)		黑色瑪拉膠帶 BLACK COATED TRANSPARENT ADHESIVE PLASTIC TAPE
(14)		白色瑪拉膠帶 WHITE COATED TRANSPARENT ADHESIVE PLASTIC TAPE
(15)		黃色瑪拉膠帶 YELLOW COATED TRANSPARENT ADHESIVE PLASTIC TAPE

检测要求

根据客户要求, 对所提交样品中的铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs) 进行测试。

Test Requested

As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the submitted sample(s).

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检测依据 Test Method

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测试项目 Tested Item(s)	测试方法 Test Method	测试仪器 Measured Equipment(s)	方法检测限 MDL
铅 Lead (Pb)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2 mg/kg
	IEC 62321:2008 Ed.1 Sec.9		
	IEC 62321:2008 Ed.1 Sec.10		
镉 Cadmium (Cd)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2 mg/kg
	IEC 62321:2008 Ed.1 Sec.9		
	IEC 62321:2008 Ed.1 Sec.10		
汞 Mercury (Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex B	UV-Vis	/
	IEC 62321:2008 Ed.1 Annex C		2 mg/kg
多溴联苯 Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg

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检测结果 Test Result(s)

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测试项目 Tested Item(s)	结果 Result			
	(1)	(2)	(3)	(4)
铅 Lead (Pb)	N.D.	N.D.	85 mg/kg	16 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.
汞 Mercury (Hg)	N.D.	N.D.	N.D.	N.D.
六价铬 Hexavalent Chromium (Cr(VI))	Negative	Negative	Negative	Negative

测试项目 Tested Item(s)	结果 Result				
	(5)	(6)	(7)	(8)	(9)
铅 Lead (Pb)	N.D.	N.D.	N.D.	N.D.	N.D.
镉 Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.
汞 Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	N.D.	N.D.	N.D.	N.D.

测试项目 Tested Item(s)	结果 Result				
	(10)	(11)	(12)	(13)	(14)
铅 Lead (Pb)	N.D.	N.D.	N.D.	N.D.	N.D.
镉 Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.
汞 Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	N.D.	N.D.	N.D.	N.D.

测试项目 Tested Item(s)	结果 Result
	(15)
铅 Lead (Pb)	N.D.
镉 Cadmium (Cd)	N.D.
汞 Mercury (Hg)	N.D.
六价铬 Hexavalent Chromium (Cr(VI))	N.D.

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测试项目 Tested Item(s)	结果 Result			
	(5)	(6)	(7)	(8)
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromobiphenyl	N.D.	N.D.	N.D.	N.D.
二溴联苯 Dibromobiphenyl	N.D.	N.D.	N.D.	N.D.
三溴联苯 Tribromobiphenyl	N.D.	N.D.	N.D.	N.D.
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	N.D.	N.D.
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	N.D.	N.D.
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	N.D.	N.D.
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	N.D.	N.D.
八溴联苯 Octabromobiphenyl	N.D.	N.D.	N.D.	N.D.
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	N.D.	N.D.
十溴联苯 Decabromobiphenyl	N.D.	N.D.	N.D.	N.D.
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
二溴二苯醚 Dibromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
三溴二苯醚 Tribromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
五溴二苯醚 Pentabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
六溴二苯醚 Hexabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
七溴二苯醚 Heptabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
八溴二苯醚 Octabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
九溴二苯醚 Nonabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
十溴二苯醚 Decabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.

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测试项目 Tested Item(s)	结果 Result			
	(9)	(10)	(11)	(12)
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromobiphenyl	N.D.	N.D.	N.D.	N.D.
二溴联苯 Dibromobiphenyl	N.D.	N.D.	N.D.	N.D.
三溴联苯 Tribromobiphenyl	N.D.	N.D.	N.D.	N.D.
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	N.D.	N.D.
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	N.D.	N.D.
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	N.D.	N.D.
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	N.D.	N.D.
八溴联苯 Octabromobiphenyl	N.D.	N.D.	N.D.	N.D.
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	N.D.	N.D.
十溴联苯 Decabromobiphenyl	N.D.	N.D.	N.D.	N.D.
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
二溴二苯醚 Dibromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
三溴二苯醚 Tribromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
五溴二苯醚 Pentabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
六溴二苯醚 Hexabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
七溴二苯醚 Heptabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
八溴二苯醚 Octabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
九溴二苯醚 Nonabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
十溴二苯醚 Decabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.

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测试项目 Tested Item(s)	结果 Result		
	(13)	(14)	(15)
多溴联苯 Polybrominated Biphenyls(PBBs)			
一溴联苯 Monobromobiphenyl	N.D.	N.D.	N.D.
二溴联苯 Dibromobiphenyl	N.D.	N.D.	N.D.
三溴联苯 Tribromobiphenyl	N.D.	N.D.	N.D.
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	N.D.
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	N.D.
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	N.D.
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	N.D.
八溴联苯 Octabromobiphenyl	N.D.	N.D.	N.D.
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	N.D.
十溴联苯 Decabromobiphenyl	N.D.	N.D.	N.D.
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)			
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	N.D.
二溴二苯醚 Dibromodiphenyl ether	N.D.	N.D.	N.D.
三溴二苯醚 Tribromodiphenyl ether	N.D.	N.D.	N.D.
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	N.D.	N.D.
五溴二苯醚 Pentabromodiphenyl ether	N.D.	N.D.	N.D.
六溴二苯醚 Hexabromodiphenyl ether	N.D.	N.D.	N.D.
七溴二苯醚 Heptabromodiphenyl ether	N.D.	N.D.	N.D.
八溴二苯醚 Octabromodiphenyl ether	N.D.	N.D.	N.D.
九溴二苯醚 Nonabromodiphenyl ether	N.D.	N.D.	N.D.
十溴二苯醚 Decabromodiphenyl ether	N.D.	N.D.	N.D.

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测试样品/部位描述 Tested Sample/Part Description

(1) 银色金属线 Silvery metal wire	(9) 黄色塑料颗粒 Yellow plastic grains
(2) 银色金属线 Silvery metal wire	(10) 银色油墨 Silvery ink
(3) 银色金属线 Silvery metal wire	(11) 黑色固体 Black solid
(4) 银色金属线 Silvery metal wire	(12) 白色油墨 White ink
(5) 银色薄膜 Silvery film	(13) 黑色胶带 Black adhesive tape
(6) 黄色固体 Yellow solid	(14) 白色胶带 White adhesive tape
(7) 黑色油墨 Black ink	(15) 黄色胶带 Yellow adhesive paste
(8) 白色固体 White solid	

注释: 对于检测铅, 镉, 汞之样品已完全溶解。

-N.D. = 未检出 (小于方法检测限)

-mg/kg = ppm = 百万分之几

-Negative 表示阴性

阴性=不含有六价铬, 由表面积为 50cm² 的样品所萃取出来的溶液中的六价铬的浓度小于 0.02mg/kg

Note: **The sample had been dissolved totally tested for Lead, Cadmium, Mercury.**

-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 0.02 mg/kg with 50cm² sample surface area used.

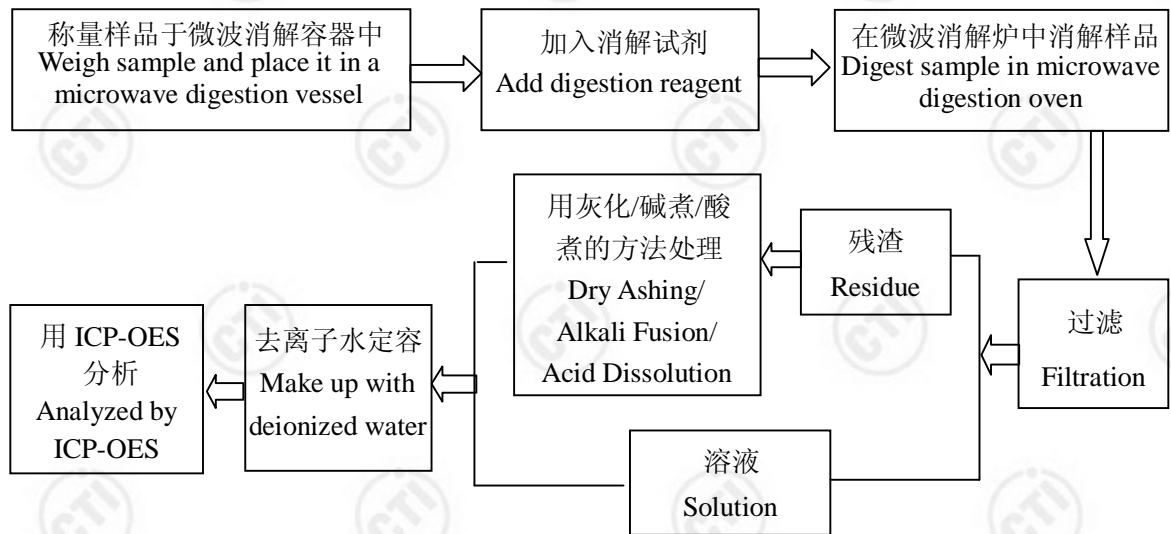
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检测流程 Test Process

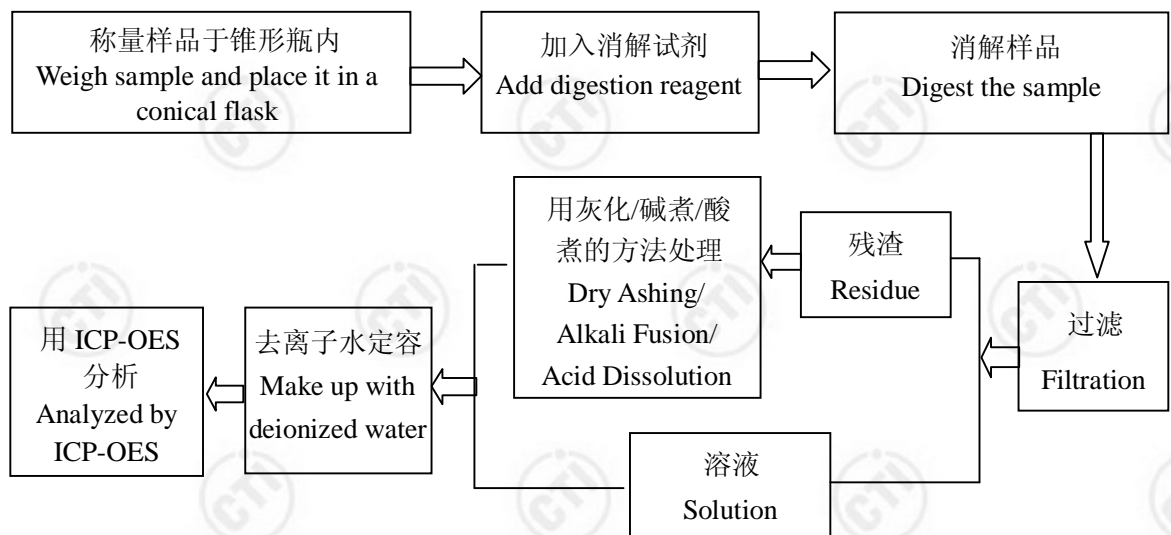
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1. 铅 Lead(Pb), 镉 Cadmium(Cd)

(1) IEC 62321:2008 Ed.1 Sec.8



(2) IEC 62321:2008 Ed.1 Sec.9

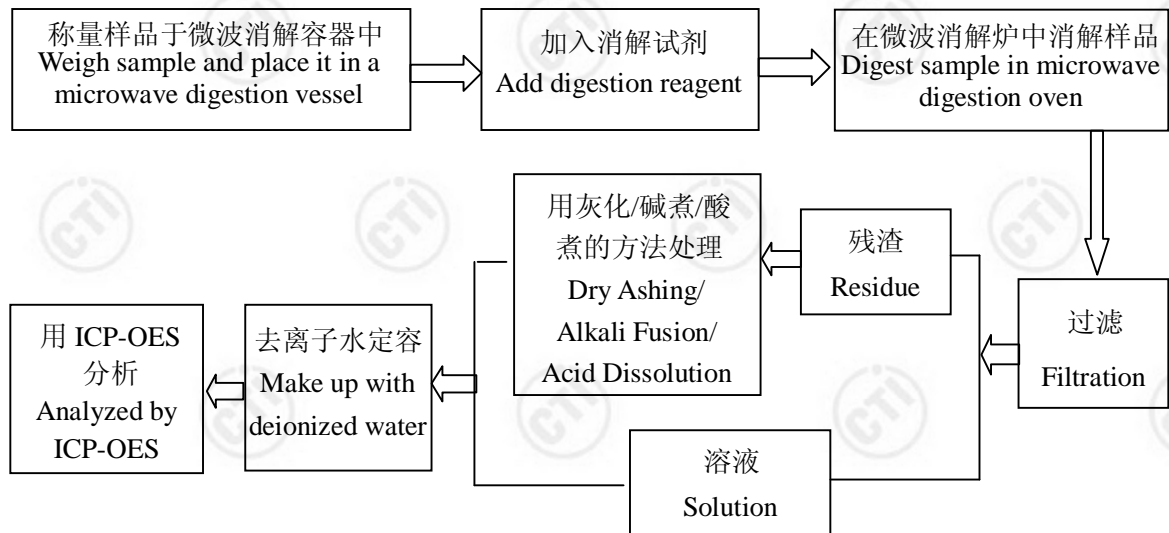


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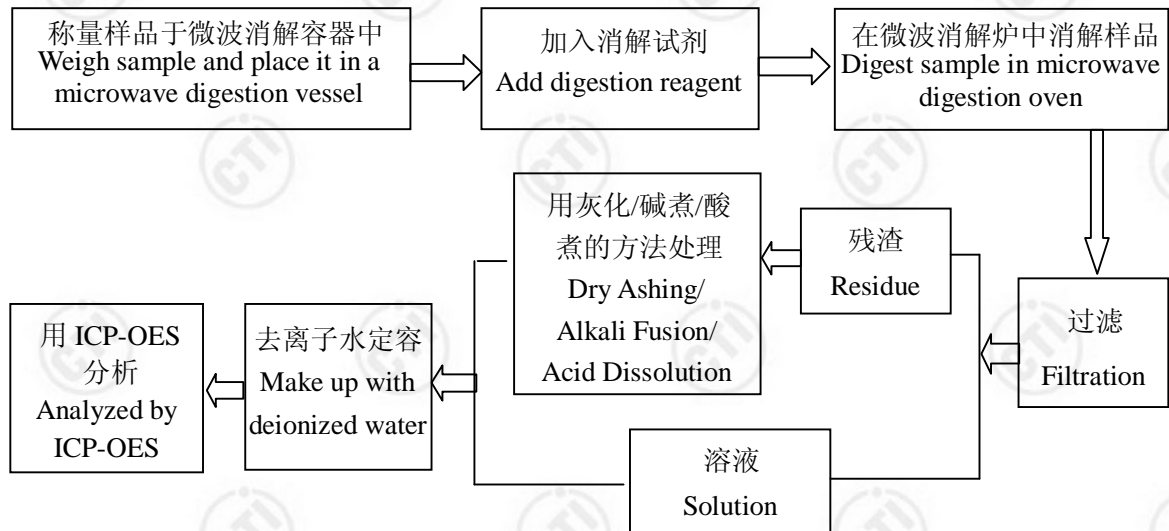
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(3) IEC 62321:2008 Ed.1 Sec.10



2. 汞 Mercury(Hg)



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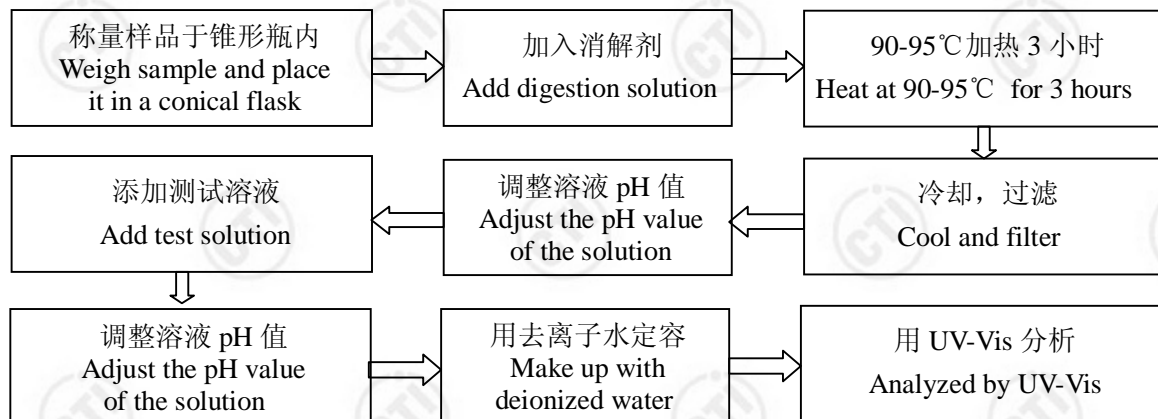
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3. 六价铬 Hexavalent Chromium (Cr(VI))

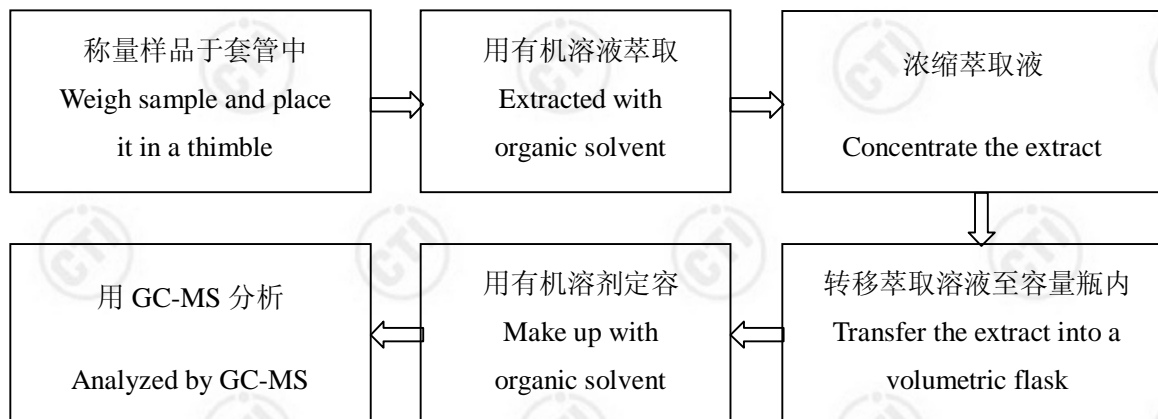
(1) IEC 62321:2008 Ed. 1 Annex B



(2) IEC 62321:2008 Ed. 1 Annex C



4. 多溴联苯 Polybrominated Biphenyls(PBBs), 多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)



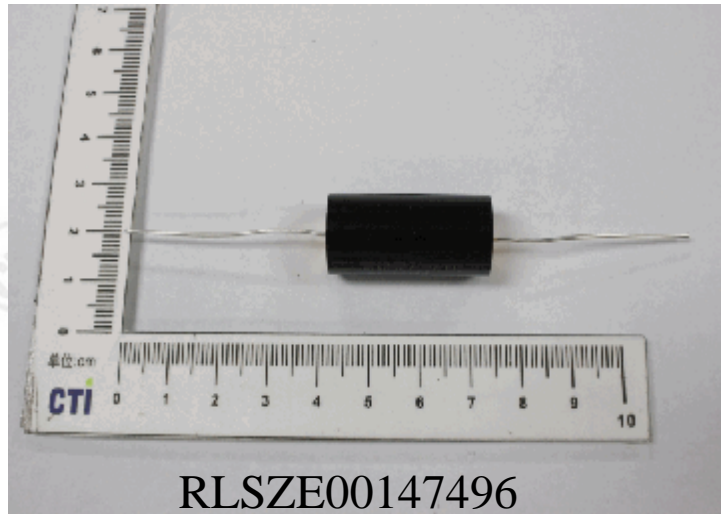
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成品图片

Photo(s) of the Finished Product(s)



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样品图片

Photo(s) of the sample(s)

(1)



(2)



(3)



(4)



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样品图片

Photo(s) of the sample(s)

(5)



(6)



(7)



(8)



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样品图片

Photo(s) of the sample(s)

(9)



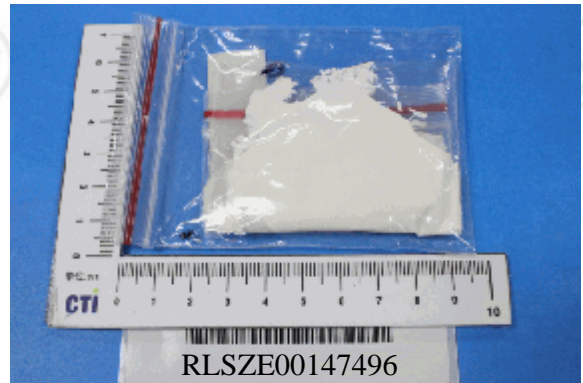
(10)



(11)



(12)



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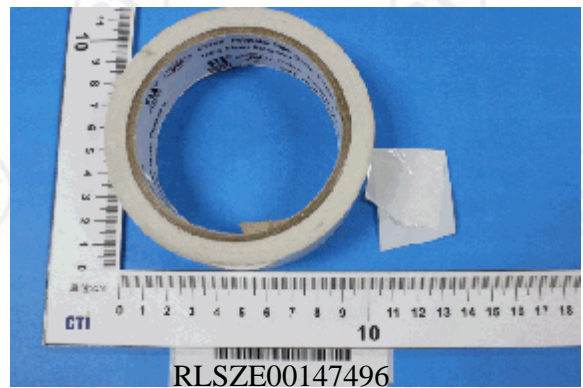
样品图片

Photo(s) of the sample(s)

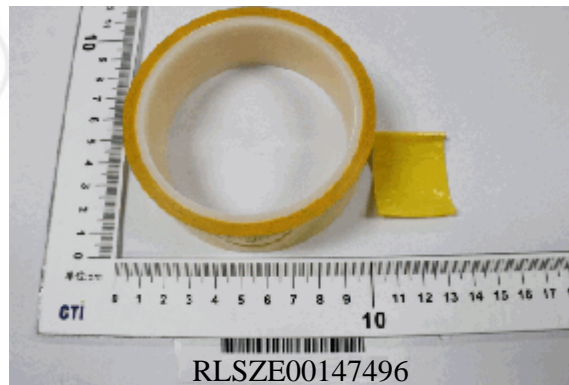
(13)



(14)



(15)



*** 报告结束 ***

*** End of Report ***

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