

检测报告 Test Report

报告编号 SCL01J040485E
Report No. SCL01J040485E

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申请单位 惠州市连普电子有限公司
Applicant LINK-PP INT'L TECHNOLOGY CO., LIMITED
地址 广东省惠州市仲恺高新区陈江嘉安工业园
Address JIAAN INDUSTRIAL PARK, CHENJIANG TOWN, ZHONGKAI DISTRICT, HUIZHOU, GUANGDONG PROVINCE
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 RJ45 集成网络变压器
样品型号 Part No. LPJ0012CNL
样品批号 Item/Lot No. LPJ SERIES; LPJD SERIES; LPJE SERIES; LPJG SERIES; LPJK SERIES; LPJU SERIES
样品接收日期 2017.06.16
Sample Received Date Jun. 16, 2017
样品检测日期 2017.06.16-2017.06.28
Testing Period Jun. 16, 2017 to Jun. 28, 2017

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), 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)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), Phthalates (DBP, BBP, DEHP, DIBP) in the submitted sample(s).

检测依据和检测结果

请参见下页

Test Method & Test Result(s) Please refer to following page(s).

主 检
Tested by

张小琴

审 核
Reviewed by

尹丹娜

批准
Approved by

郑晴涛

日 期
Date

2017.06.28

郑晴涛

技术经理 Technical Manager



华测检测集团股份有限公司
Centre Testing International Group Co., Ltd.

No. R289325640

广东省深圳市宝安区 70 区鸿威工业园

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

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结论 Conclusion

测试样品 Tested Sample	依据指令 According to directive	结果 Result
提交样品 Submitted Sample	欧盟 RoHS 指令 2011/65/EU 及其修订指令 (EU) 2015/863 RoHS Directive 2011/65/EU with amendment (EU) 2015/863	符合 Pass

符合表示检测结果满足欧盟 RoHS 指令 2011/65/EU 及其修订指令(EU) 2015/863 要求的限值。

Pass means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

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检测依据 Test Method

测试项目 Tested Item(s)	测试方法 Test Method	测试仪器 Measured Equipment(s)
铅 Lead (Pb), 镉 Cadmium (Cd), 汞 Mercury (Hg), 六价铬 Hexavalent Chromium (Cr(VI))	IEC 62321-5:2013 Ed.1.0, 参考 IEC 62321-5:2013 Ed.1.0 Refer to IEC 62321-5:2013 Ed.1.0, IEC 62321-4:2013 Ed.1.0, 参考 IEC 62321-4:2013 Ed.1.0 Refer to IEC 62321-4:2013 Ed.1.0, IEC 62321-7-2:2017, IEC 62321-7-1:2015, IEC 62321:2008 Ed.1 Annex B	ICP-OES, UV-Vis
多溴联苯 Polybrominated Biphenyls (PBBs), 多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)	参考 IEC 62321-8 CDV Refer to IEC 62321-8 CDV	GC-MS

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(1)	(2)		
铅 Lead (Pb)	N.D.	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.▼	N.D.▼	0.10 µg/cm ² (LOQ)	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(3)	(4)		
铅 Lead (Pb)	18 mg/kg	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	N.D.	8 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(5)	(6)		
铅 Lead (Pb)	N.D.	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	N.D.	8 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(7)	(8)		
铅 Lead (Pb)	N.D.	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	N.D.	8 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(9)	(10)		
铅 Lead (Pb)	N.D.	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	N.D.	8 mg/kg	1000 mg/kg

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(11)	(12)		
铅 Lead (Pb)	N.D.	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	阴性 Negative	阴性 Negative	/	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(13)	(14)		
铅 Lead (Pb)	18 mg/kg	21 mg/kg	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	---	8 mg/kg	1000 mg/kg
	---	N.D. ▼	0.10 µg/cm ² (LOQ)	

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(15)	(16)		
铅 Lead (Pb)	17 mg/kg	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	---	N.D.	8 mg/kg	1000 mg/kg
	N.D. ▼	---	0.10 µg/cm ² (LOQ)	

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(17)	(18)		
铅 Lead (Pb)	189 mg/kg	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	---	N.D.	8 mg/kg	1000 mg/kg
	N.D. ▼	---	0.10 µg/cm ² (LOQ)	

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(19)	(20)		
铅 Lead (Pb)	N.D.	557 mg/kg*	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.	N.D.	8 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(21)	(22)		
铅 Lead (Pb)	46 mg/kg	27 mg/kg	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D.▼	N.D.▼	0.10 µg/cm ² (LOQ)	1000 mg/kg

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测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(3)	(4)		
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromodiphenyl	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	N.D.	5 mg/kg	
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	N.D.	5 mg/kg	
三溴二苯醚 Tribromobiphenyl ether	N.D.	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
五溴二苯醚 Pentabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
六溴二苯醚 Hexabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
七溴二苯醚 Heptabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
八溴二苯醚 Octabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
九溴二苯醚 Nonabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
十溴二苯醚 Decabromobiphenyl ether	N.D.	N.D.	5 mg/kg	

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测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(5)	(6)		
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromodiphenyl	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	N.D.	5 mg/kg	
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	N.D.	5 mg/kg	
三溴二苯醚 Tribromobiphenyl ether	N.D.	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
五溴二苯醚 Pentabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
六溴二苯醚 Hexabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
七溴二苯醚 Heptabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
八溴二苯醚 Octabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
九溴二苯醚 Nonabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
十溴二苯醚 Decabromobiphenyl ether	N.D.	N.D.	5 mg/kg	

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测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(7)	(8)		
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromodiphenyl	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	N.D.	5 mg/kg	
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	N.D.	5 mg/kg	
三溴二苯醚 Tribromobiphenyl ether	N.D.	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
五溴二苯醚 Pentabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
六溴二苯醚 Hexabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
七溴二苯醚 Heptabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
八溴二苯醚 Octabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
九溴二苯醚 Nonabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
十溴二苯醚 Decabromobiphenyl ether	N.D.	N.D.	5 mg/kg	

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测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(9)	(10)		
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromodiphenyl	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	N.D.	5 mg/kg	
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	N.D.	5 mg/kg	
三溴二苯醚 Tribromobiphenyl ether	N.D.	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
五溴二苯醚 Pentabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
六溴二苯醚 Hexabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
七溴二苯醚 Heptabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
八溴二苯醚 Octabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
九溴二苯醚 Nonabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
十溴二苯醚 Decabromobiphenyl ether	N.D.	N.D.	5 mg/kg	

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(13)	(16)		
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromodiphenyl	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	N.D.	5 mg/kg	
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	N.D.	5 mg/kg	
三溴二苯醚 Tribromobiphenyl ether	N.D.	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
五溴二苯醚 Pentabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
六溴二苯醚 Hexabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
七溴二苯醚 Heptabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
八溴二苯醚 Octabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
九溴二苯醚 Nonabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
十溴二苯醚 Decabromobiphenyl ether	N.D.	N.D.	5 mg/kg	

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测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(18)	(19)		
多溴联苯 Polybrominated Biphenyls(PBBs)				
一溴联苯 Monobromodiphenyl	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	N.D.	5 mg/kg	
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)				
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	N.D.	5 mg/kg	
三溴二苯醚 Tribromobiphenyl ether	N.D.	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
五溴二苯醚 Pentabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
六溴二苯醚 Hexabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
七溴二苯醚 Heptabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
八溴二苯醚 Octabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
九溴二苯醚 Nonabromobiphenyl ether	N.D.	N.D.	5 mg/kg	
十溴二苯醚 Decabromobiphenyl ether	N.D.	N.D.	5 mg/kg	

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	(20)		
多溴联苯 Polybrominated Biphenyls(PBBs)			
一溴联苯 Monobromodiphenyl	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg	
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)			
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	5 mg/kg	
三溴二苯醚 Tribromobiphenyl ether	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	5 mg/kg	
五溴二苯醚 Pentabromobiphenyl ether	N.D.	5 mg/kg	
六溴二苯醚 Hexabromobiphenyl ether	N.D.	5 mg/kg	
七溴二苯醚 Heptabromobiphenyl ether	N.D.	5 mg/kg	
八溴二苯醚 Octabromobiphenyl ether	N.D.	5 mg/kg	
九溴二苯醚 Nonabromobiphenyl ether	N.D.	5 mg/kg	
十溴二苯醚 Decabromobiphenyl ether	N.D.	5 mg/kg	

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(3)	(4)		
邻苯二甲酸酯 Phthalates				
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄酯 Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸(2-乙基己基)酯 Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate(DIBP)CAS#:84-69-5	N.D.	N.D.	50 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(5)	(6)		
邻苯二甲酸酯 Phthalates				
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄酯 Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸(2-乙基己基)酯 Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate(DIBP)CAS#:84-69-5	N.D.	N.D.	50 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(7)	(8)		
邻苯二甲酸酯 Phthalates				
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄酯 Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸(2-乙基己基)酯 Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate(DIBP)CAS#:84-69-5	N.D.	N.D.	50 mg/kg	1000 mg/kg

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(9)	(10)		
邻苯二甲酸酯 Phthalates				
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄酯 Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸(2-乙基己基)酯 Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate(DIBP)CAS#:84-69-5	N.D.	N.D.	50 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(13)	(16)		
邻苯二甲酸酯 Phthalates				
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄酯 Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸(2-乙基己基)酯 Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate(DIBP)CAS#:84-69-5	N.D.	N.D.	50 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result		方法检出限 MDL	限值 Limit
	(18)	(19)		
邻苯二甲酸酯 Phthalates				
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄酯 Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸(2-乙基己基)酯 Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate(DIBP)CAS#:84-69-5	N.D.	N.D.	50 mg/kg	1000 mg/kg

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检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	(20)		
邻苯二甲酸酯 Phthalates			
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄酯 Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸(2-乙基己基)酯 Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate(DIBP)CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

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

- (1) 银色镀层 Silvery plating
- (2) 金属基材 Metal base
- (3) 黑色塑料 Black plastic
- (4) 黑色胶 Black glue
- (5) 红色漆包线 Red enamelled wire
- (6) 白色线 White thread
- (7) 铜色漆包线 Cupreous enamelled wire
- (8) 红色漆包线 Red enamelled wire
- (9) 蓝色漆包线 Blue enamelled wire
- (10) 绿色漆包线 Green enamelled wire
- (11) 深灰色磁体 Deep gray magnet
- (12) 深灰色磁体 Deep gray magnet
- (13) 黑色塑料 Black plastic
- (14) 金色/银色金属 Golden/silvery metal
- (15) 铜色金属 Cupreous metal
- (16) PCB（整体测试）PCB(Tested as a whole)[#]
- (17) 银色金属 Silvery metal
- (18) 棕色电容（整体测试）Brown capacitance(Tested as a whole)[#]
- (19) 棕黄色电容（整体测试）Brown-yellow capacitance(Tested as a whole)[#]
- (20) 黑色电阻（整体测试）Black resistance(Tested as a whole)[#]
- (21) 银色镀层 Silvery plating
- (22) 金属基材 Metal base

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备注: 对于检测铅, 镉, 汞之样品已完全溶解。

- N.D. = 未检出 (小于方法检出限或定量限)
- mg/kg = ppm = 百万分之一
- LOQ = 定量限, 六价铬的定量限为 $0.10 \mu\text{g}/\text{cm}^2$
- ▼六价铬浓度小于 $0.10 \mu\text{g}/\text{cm}^2$, 样品未检出六价铬。
- 阴性表示不含有六价铬, 即由表面积为 50cm^2 的样品所萃取出来的溶液中, 测得六价铬的浓度小于 $0.02\text{mg}/\text{L}$ 。
- # 按照目前手段, 样品无法进一步拆分, 样品整体测试, 测试结果不代表整体测试样品中任何一种单一材质的含量。
- *根据客户声明, 样品涉及欧盟 RoHS 指令 2011/65/EU 豁免项第 7(c)-I 条: 电子电气元件的玻璃或陶瓷中的铅或玻璃或陶瓷基混合物中的铅, 电容器的介电陶瓷除外, 如压电陶瓷装置。

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

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL or LOQ)
- mg/kg = ppm = parts per million
- LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is $0.10 \mu\text{g}/\text{cm}^2$
- ▼The sample is negative for Cr(VI) – The Cr(VI) concentration is below $0.10 \mu\text{g}/\text{cm}^2$. The coating is considered a non-Cr(VI) based coating.
- Negative = Absence of Cr (VI). The Cr (VI) concentration detected in the boiling water extraction solution is less than $0.02 \text{mg}/\text{L}$ with 50cm^2 sample surface area used.
- # As specified by client, the test was conducted by mixing all materials together. The result(s) shown on this report may be different from the content of any homogeneous material.
- *According to the client's statement, the material of the sample(s) fall into exemption items 7(c)-I according to EU Directive 2011/65/EU: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

注释: 本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。

Note: The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.

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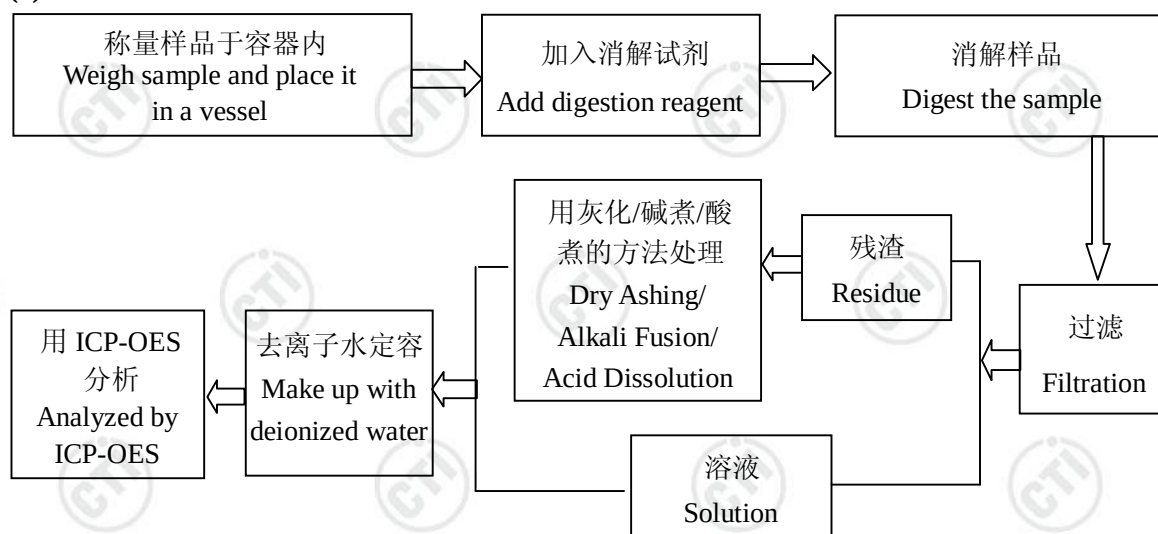
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检测流程 Test Process

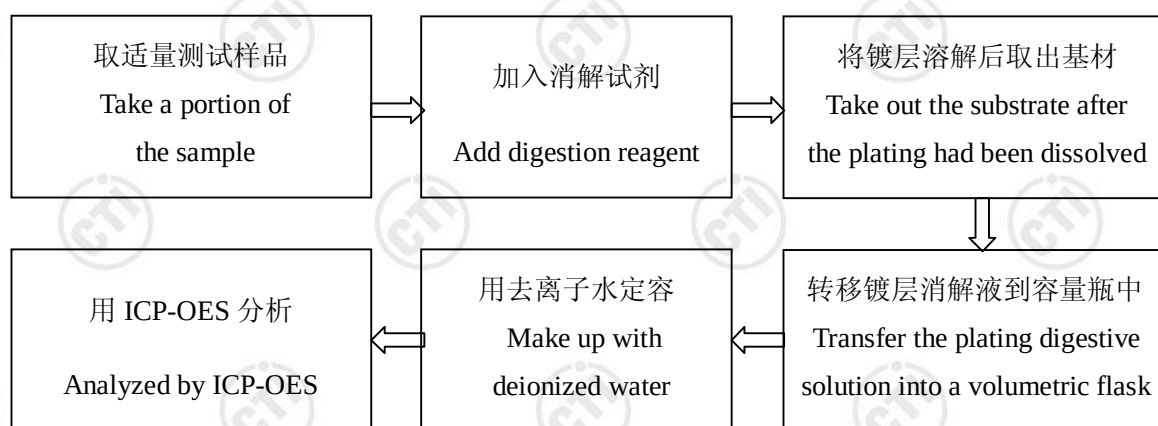
1. 铅 Lead(Pb), 镉 Cadmium(Cd), 铬 Chromium(Cr)

(1) IEC 62321-5:2013 Ed.1.0



(2) 参考 IEC 62321-5:2013 Ed.1.0

Refer to IEC 62321-5:2013 Ed.1.0



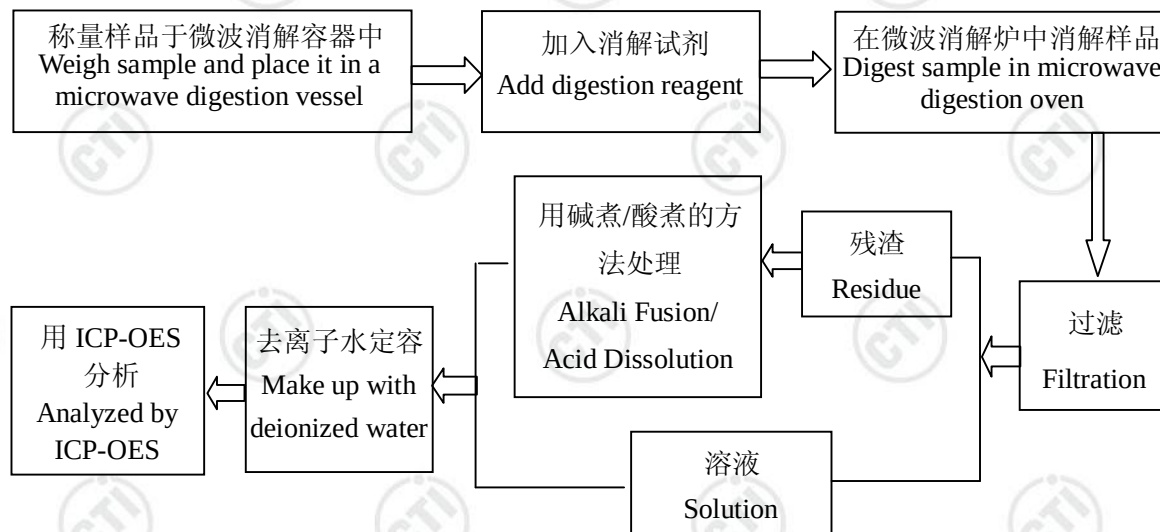
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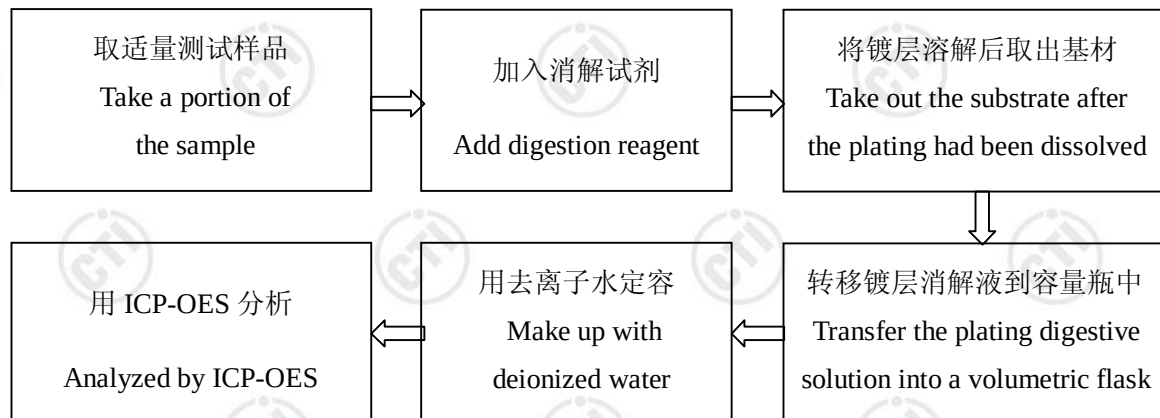
2. 汞 Mercury(Hg)

(1) IEC 62321-4:2013 Ed.1.0



(2) 参考 IEC 62321-4:2013 Ed.1.0

Refer to IEC 62321-4:2013 Ed.1.0



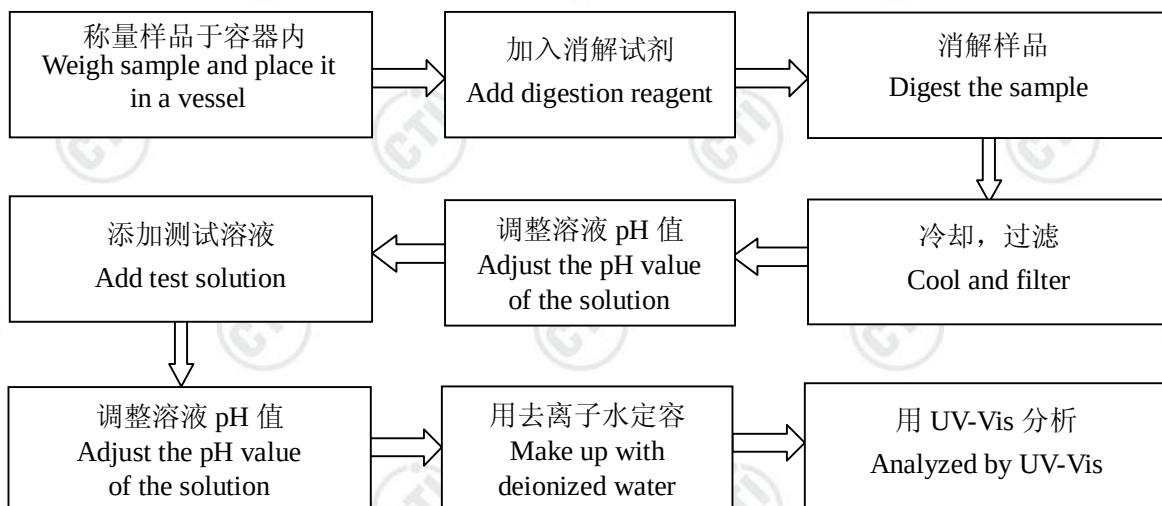
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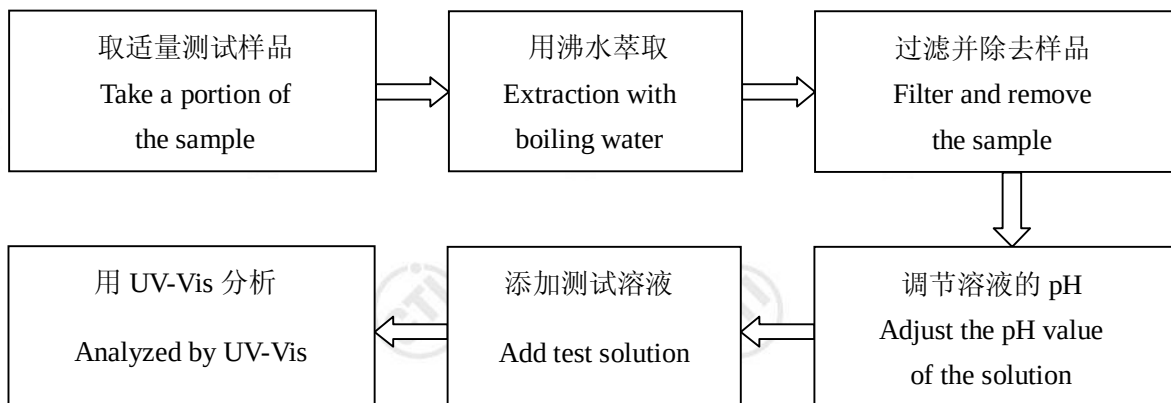
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3. 六价铬 Hexavalent Chromium (Cr(VI))

(1) IEC 62321-7-2:2017



(2) IEC 62321-7-1:2015, IEC 62321:2008 Ed.1 Annex B

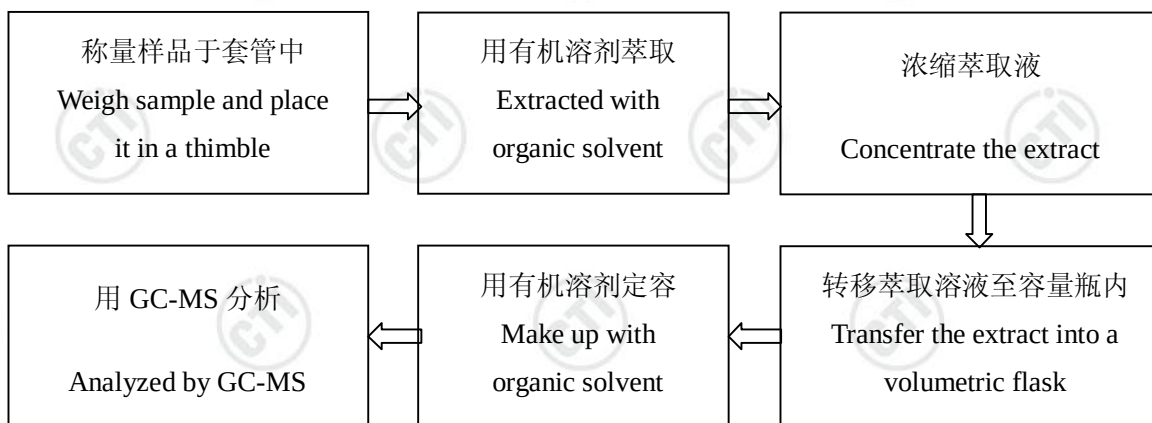


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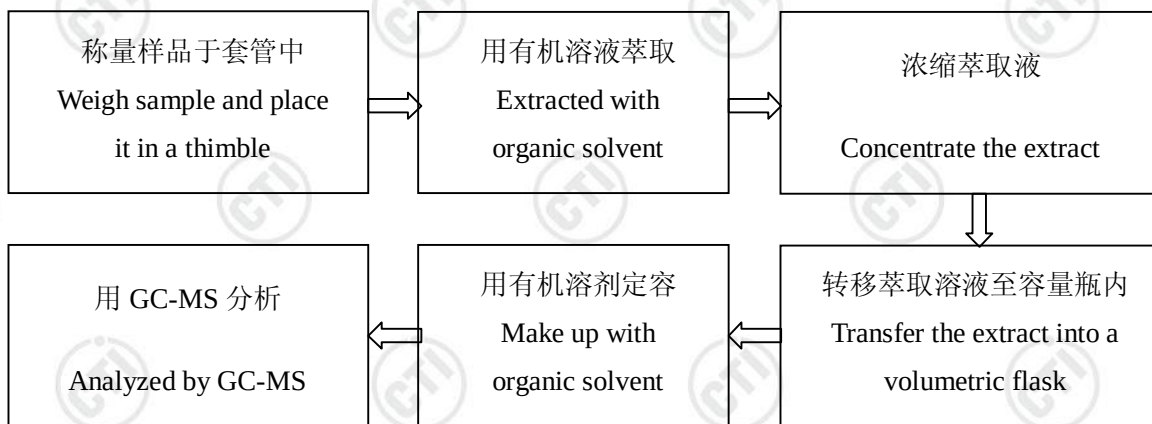
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4. 多溴联苯 Polybrominated Biphenyls(PBBs), 多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)



5. 邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)



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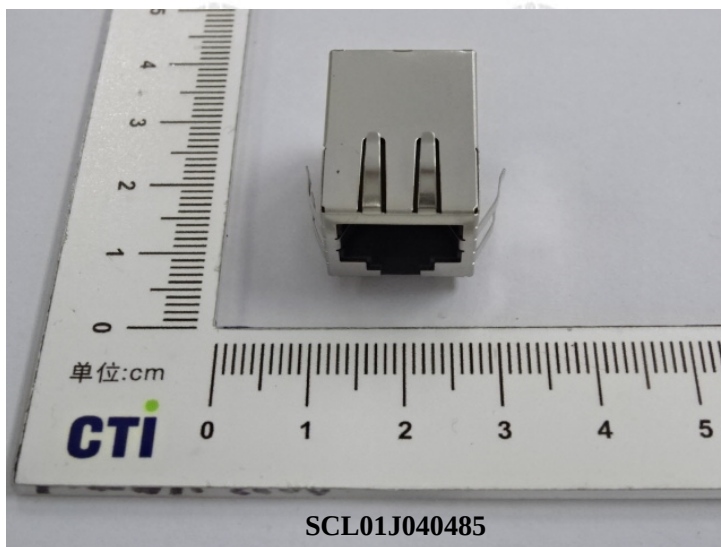
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成品图片

Photo(s) of the Finished Product(s)



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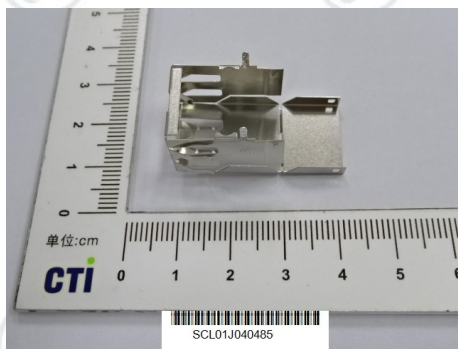
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样品图片

Photo(s) of the sample(s)

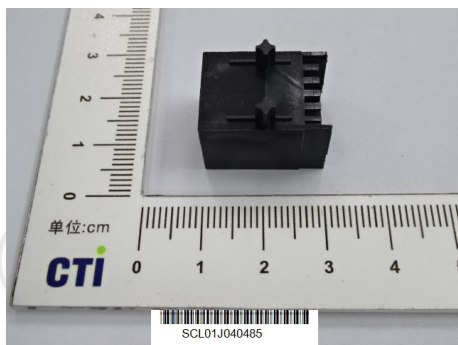
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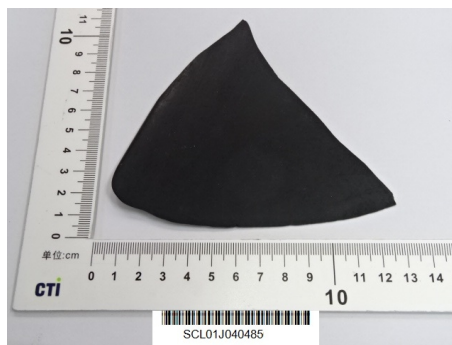
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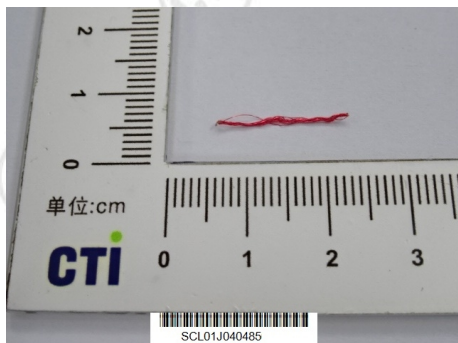
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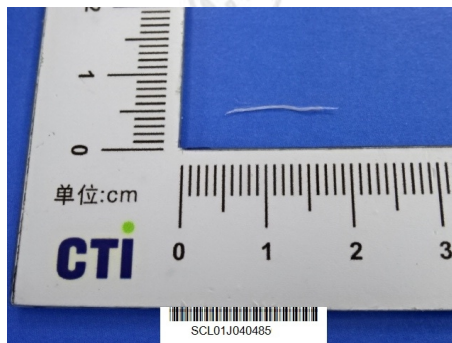
(4)



(5)



(6)



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样品图片

Photo(s) of the sample(s)

(7)



(8)



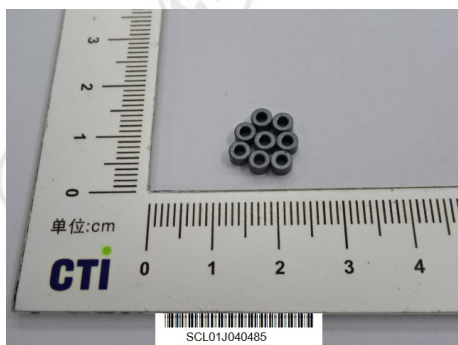
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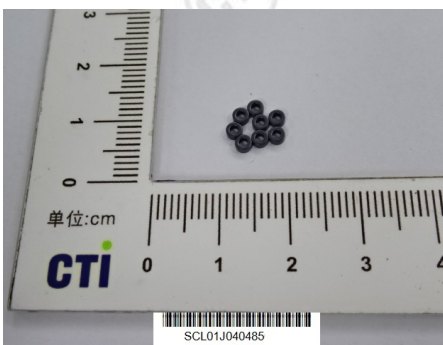
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(11)



(12)



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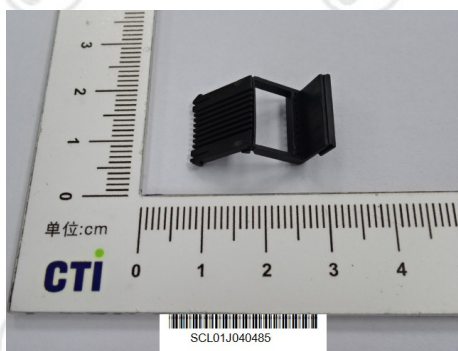
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样品图片

Photo(s) of the sample(s)

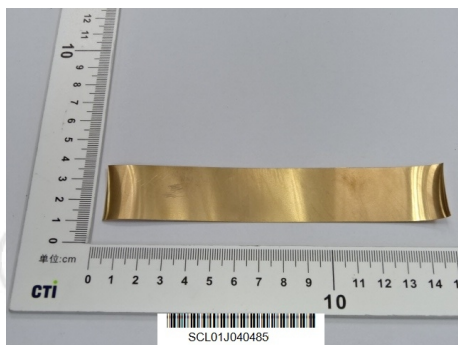
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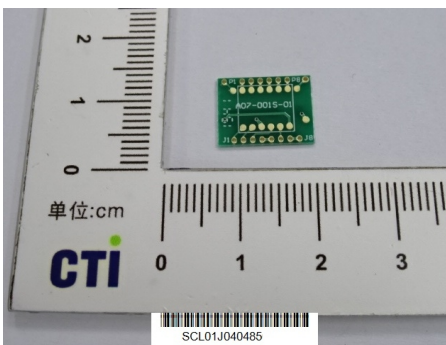
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(15)



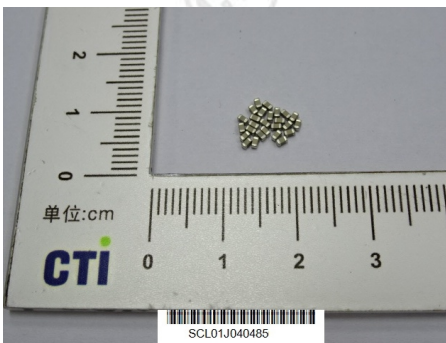
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(17)



(18)



检测报告 Test Report

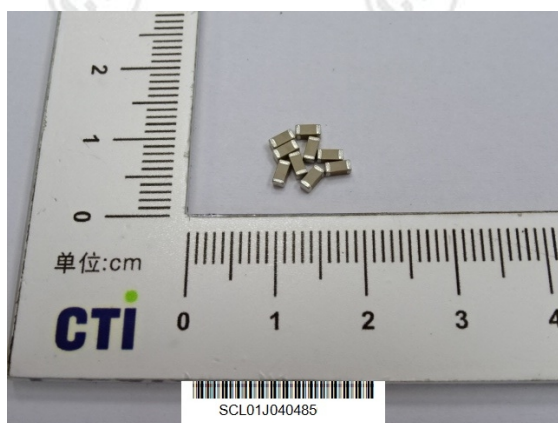
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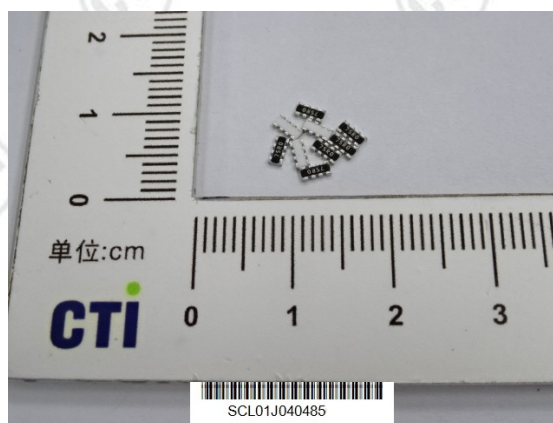
样品图片

Photo(s) of the sample(s)

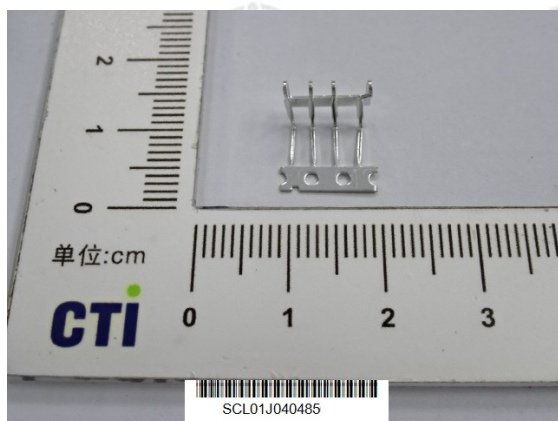
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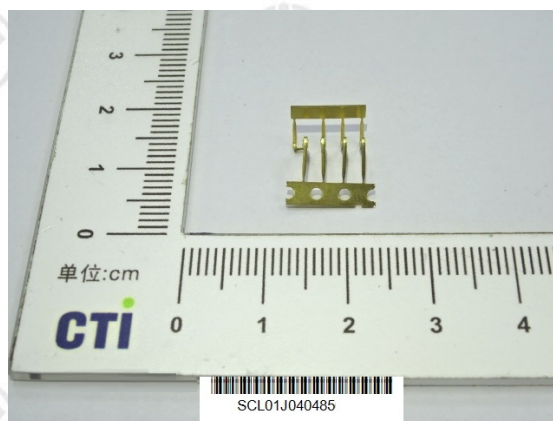
(20)



(21)



(22)



*** 报告结束 ***

*** End of Report ***

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