

Report No.: 18300RC10148501
报告编号: 18300RC10148501

Test Report

检测报告

Client Name : Fujian Qiaoguang Electronic Technology co.,ltd.
委托单位 : 福建省乔光电子科技有限公司

Address : Dayang Road.Xiyuan Town.Zhangping City.Dengbang
地址 : New Industrial and Trade Zone
漳平市西园镇大洋路登榜工贸新区

Product Name : Zinc oxide varistor (copper electrode)
产品名称 : 氧化锌压敏电阻(铜电极)

Date : Apr. 21, 2021
日期 : 2021年04月21日


Shenzhen Anbotek Compliance Laboratory Limited

深圳安博检测股份有限公司

检测专用章

Shenzhen Anbotek Compliance Laboratory Limited

Address: East of 4/F., Building A, Hourui No.3 Industrial Zone, Xixiang Street, Bao'an District,
Shenzhen, Guangdong, China
Tel: (86)755-26066126 Fax: (86)755-26066021 Email: service@anbotek.com

 Hotline
400-003-0500
www.anbotek.com

Test Report

检测报告

Report No.: 18300RC10148501 Date: Apr. 21, 2021 Page 1 of 9
报告编号: 18300RC10148501 日期: 2021年04月21日 页数: 第1页 共9页

Applicant : Fujian Qiaoguang Electronic Technology co.,ltd.
申请单位 : 福建省乔光电子科技有限公司
Address : Dayang Road.Xiyuan Town.Zhangping City.Dengbang New Industrial and Trade Zone
地址 : 漳平市西园镇大洋路登榜工贸新区

The submitted sample and sample information was/were submitted and identified by/on the behalf of the client/委托检测之样品及样品信息由申请者提供并确认

Sample Name/样品名称 : Zinc oxide varistor (copper electrode)/氧化锌压敏电阻(铜电极)
Material/材料 : Zinc oxide + silver + epoxy resin +CP line/氧化锌+银+环氧树脂+CP 线
Sample Received Date : Apr. 14, 2021
样品接收日期 : 2021年04月14日
Testing Period : Apr. 14, 2021 to Apr. 20, 2021
样品测试日期 : 2021年04月14日至2021年04月20日

Test Requested : As specified by client, to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Diisobutyl phthalate (DIBP), Dibutyl phthalate(DBP), Benzyl butyl phthalate(BBP), Di-2-ethylhexyl Phthalate (DEHP) in the submitted sample in accordance with the RoHS Directive 2011/65/EU and amendment Commission Delegated Directive (EU) 2015/863 with effective from 22 July 2019.
检测要求 : 根据客户要求,依据 RoHS 指令 2011/65/EU 以及修订指令(EU) 2015/863(从2019年7月22日开始生效),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),邻苯二甲酸二异丁酯(DIBP),邻苯二甲酸二丁酯(DBP),邻苯二甲酸丁苄酯(BBP),邻苯二甲酸二(2-乙基己基)酯(DEHP)进行测试。

Test Method: Please refer to the following page(s). /**检测方法:** 请参见下页。

Test Result(s): Please refer to the following page(s). /**检测结果:** 请参见下页。

Edited by Mabel Lin
报告编制人

Reviewed by Rose Yang
报告审核人

Authorized Signatory Wendy Wang
授权签字人

Test Report

检测报告

Report No.: 18300RC10148501
报告编号: 18300RC10148501

Date: Apr. 21, 2021
日期: 2021年04月21日

Page 2 of 9
页数: 第 2 页 共 9 页

Tested Sample/Part Description: (测试样品/部位描述)

A# All parts mixed / 整体混测

Test Method: (检测方法)

Tested Item(s) 测试项目	Test Method 测试方法	Measured Equipment(s) 测试仪器
Lead(Pb)/ 铅 (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium(Cd)/ 镉 (Cd)	IEC 62321-5:2013	ICP-OES
Mercury(Hg)/ 汞 (Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES
Hexavalent Chromium(Cr(VI)) 六价铬 (Cr(VI))	IEC 62321-7-2:2017	UV-Vis
Polybrominated Biphenyls(PBBs) 多溴联苯 (PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs) 多溴二苯醚 (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates/ 邻苯二甲酸酯	IEC 62321-8:2017	GC-MS

Test Result(s): (检测结果)

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

Test Report

检测报告

Report No.: 18300RC10148501
报告编号: 18300RC10148501

Date: Apr. 21, 2021
日期: 2021年04月21日

Page 3 of 9
页数: 第3页共9页

Tested Item(s) 测试项目	Result/结果 Unit/单位(mg/kg)	MDL/方法检测限 Unit/单位(mg/kg)	Limit/限值 Unit/单位(mg/kg)
	A#		
Polybrominated Biphenyls(PBBs) 多溴联苯(PBBs)	N.D.	--	1000
Monobromobiphenyl/一溴联苯	N.D.	5	--
Dibromobiphenyl/二溴联苯	N.D.	5	--
Tribromobiphenyl/三溴联苯	N.D.	5	--
Tetrabromobiphenyl/四溴联苯	N.D.	5	--
Pentabromobiphenyl/五溴联苯	N.D.	5	--
Hexabromobiphenyl/六溴联苯	N.D.	5	--
Heptabromobiphenyl/七溴联苯	N.D.	5	--
Octabromobiphenyl/八溴联苯	N.D.	5	--
Nonabromobiphenyl/九溴联苯	N.D.	5	--
Decabromobiphenyl/十溴联苯	N.D.	5	--
Polybrominated Diphenyl Ethers(PBDEs) 多溴二苯醚(PBDEs)	N.D.	--	1000
Monobromodiphenyl ether/一溴二苯醚	N.D.	5	--
Dibromodiphenyl ether/二溴二苯醚	N.D.	5	--
Tribromodiphenyl ether/三溴二苯醚	N.D.	5	--
Tetrabromodiphenyl ether/四溴二苯醚	N.D.	5	--
Pentabromodiphenyl ether/五溴二苯醚	N.D.	5	--
Hexabromodiphenyl ether/六溴二苯醚	N.D.	5	--
Heptabromodiphenyl ether/七溴二苯醚	N.D.	5	--
Octabromodiphenyl ether/八溴二苯醚	N.D.	5	--
Nonabromodiphenyl ether/九溴二苯醚	N.D.	5	--
Decabromodiphenyl ether/十溴二苯醚	N.D.	5	--



Test Report

检测报告

Report No.: 18300RC10148501
报告编号: 18300RC10148501

Date: Apr. 21, 2021
日期: 2021年04月21日

Page 4 of 9
页数: 第 4 页 共 9 页

Tested Item(s) 测试项目	Result/结果 Unit/单位 (mg/kg)	MDL/方法检测限 Unit/单位 (mg/kg)	Limit/限值 Unit/单位 (mg/kg)
	A#		
Dibutyl phthalate(DBP)/ 邻苯二甲酸二丁酯(DBP) CAS #:84-74-2	N.D.	50	1000
Benzylbutyl phthalate(BBP)/ 邻苯二甲酸丁苄酯(BBP) CAS #:85-68-7	N.D.	50	1000
Di-2-ethylhexyl Phthalate (DEHP)/ 邻苯二甲酸二(2-乙基己基)酯(DEHP) CAS #:117-81-7	N.D.	50	1000
Diisobutyl phthalate (DIBP)/ 邻苯二甲酸二异丁酯 (DIBP) CAS #:84-69-5	N.D.	50	1000

Note: (备注)

-N.D. = Not Detected (<MDL) =未检出 (小于方法检测限)

-mg/kg = ppm = parts per million =百万分之几

-#=According to the applicant's request, the admixture of specimen A is tested as a whole. The testing results of specimen A may be different from that of any sole material in specimen A.

-#=根据客户的要求, 对样品 A 进行混测。样品 A 的测试结果可能与单测样品 A 中任何一种材料的结果有差异。

Test Report

检测报告

Report No.: 18300RC10148501

Date: Apr. 21, 2021

Page 5 of 9

报告编号: 18300RC10148501

日期: 2021年04月21日

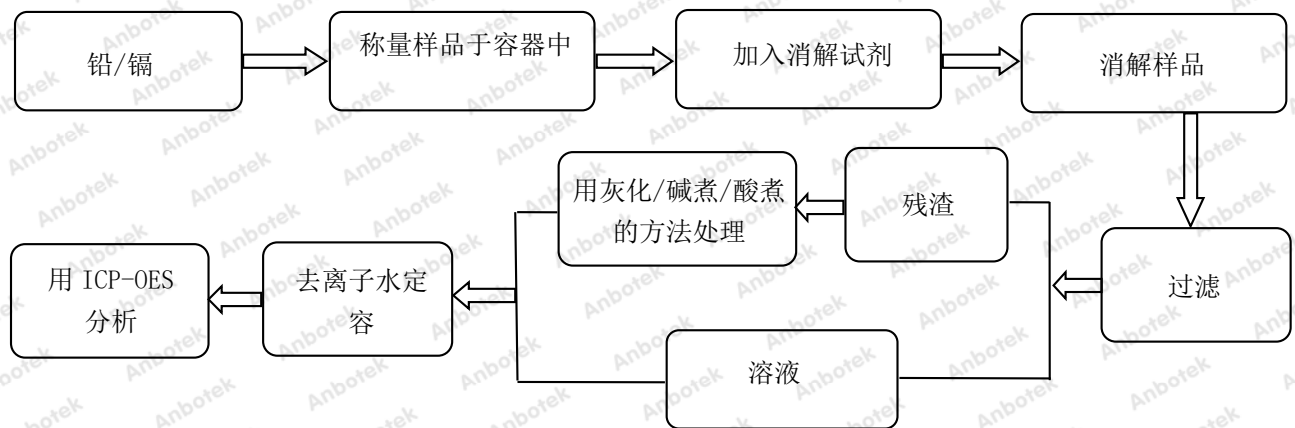
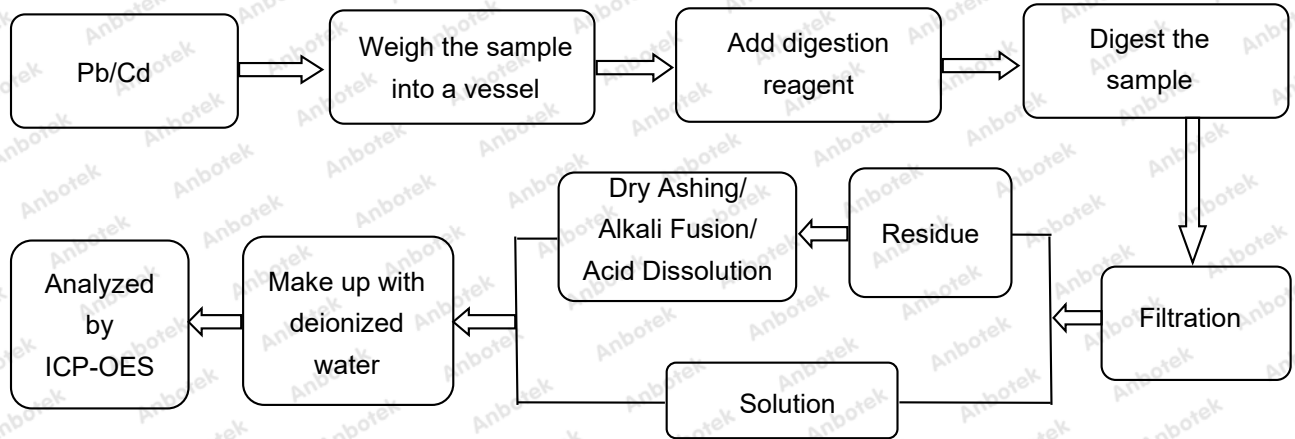
页数: 第5页共9页

Test Process: (检测流程)

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

对于检测铅, 镉, 汞之样品已完全溶解。

◆ IEC 62321-5:2013



Test Report

检测报告

Report No.: 18300RC10148501

Date: Apr. 21, 2021

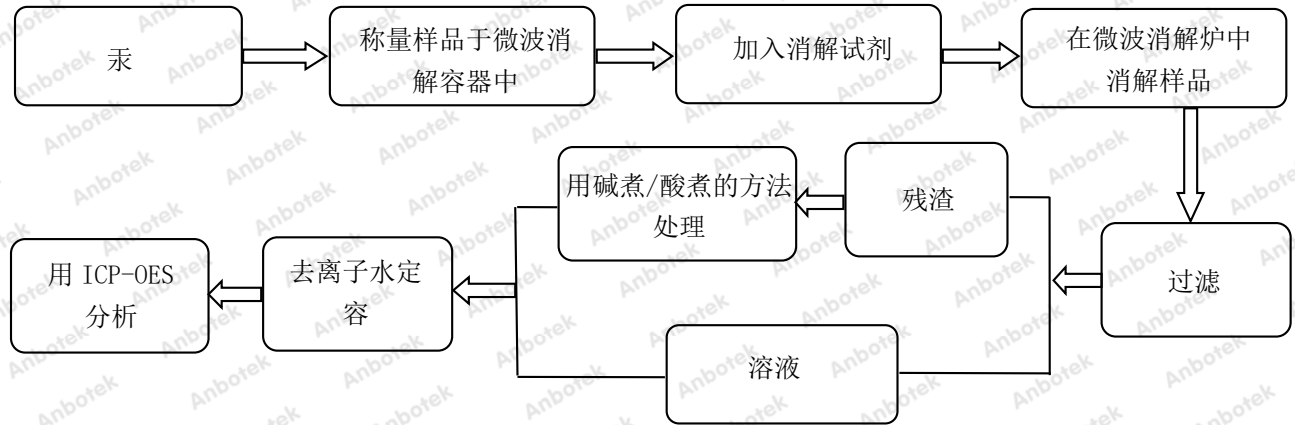
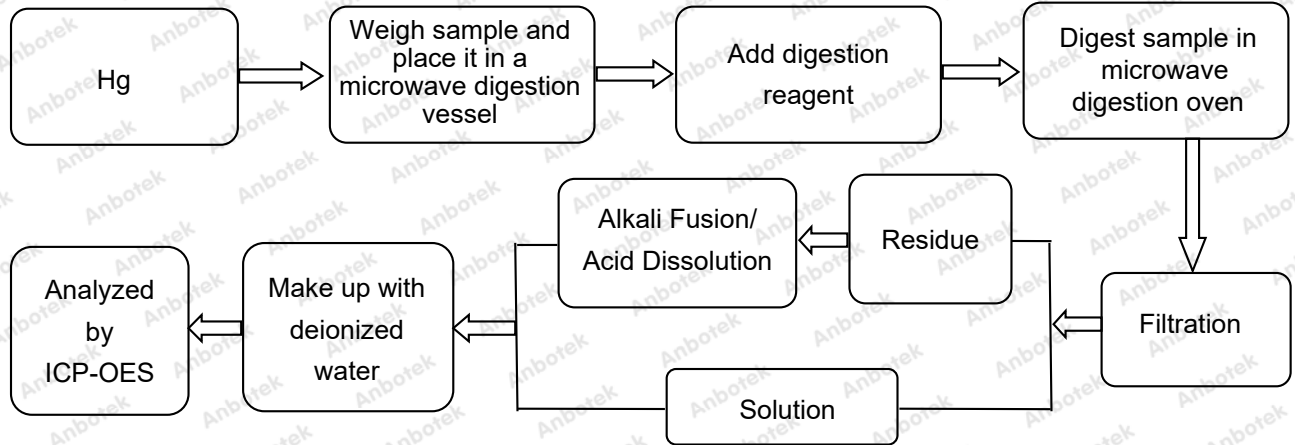
Page 6 of 9

报告编号: 18300RC10148501

日期: 2021年04月21日

页数: 第6页共9页

◆ IEC 62321-4:2013+AMD1:2017



Test Report

检测报告

Report No.: 18300RC10148501

Date: Apr. 21, 2021

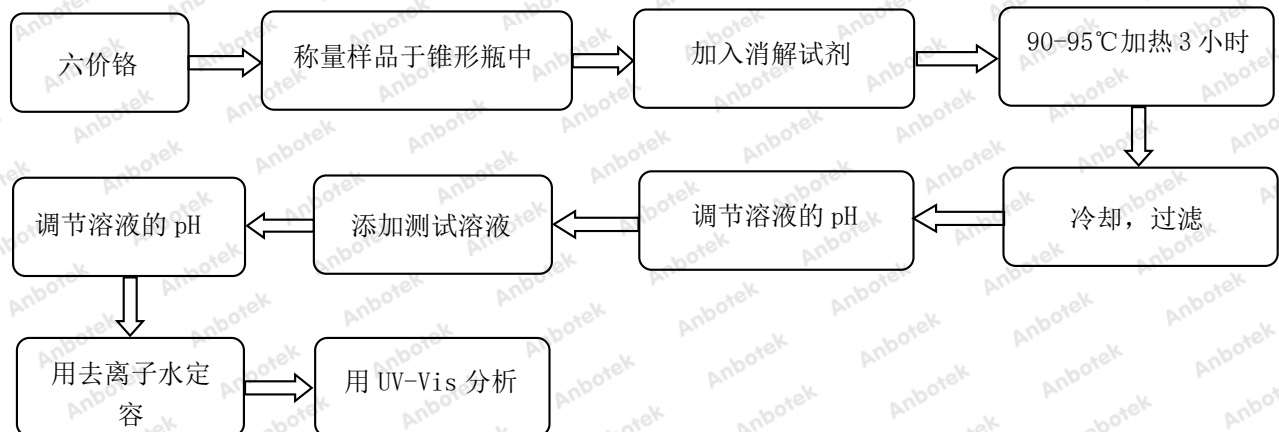
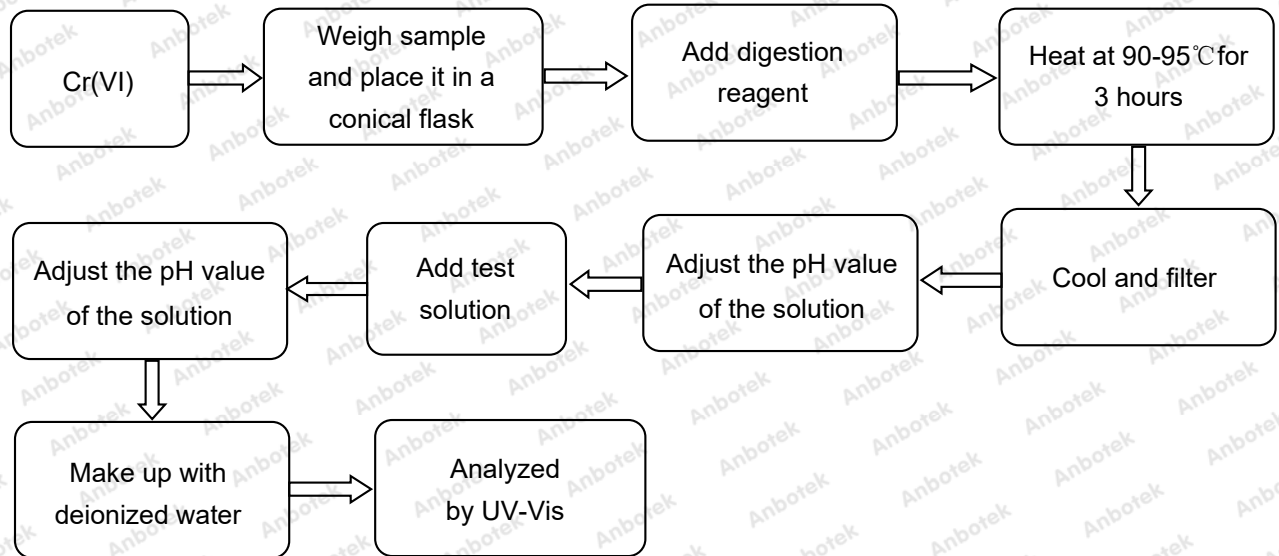
Page 7 of 9

报告编号: 18300RC10148501

日期: 2021年04月21日

页数: 第7页 共9页

◆ IEC 62321-7-2:2017



Test Report

检测报告

Report No.: 18300RC10148501

Date: Apr. 21, 2021

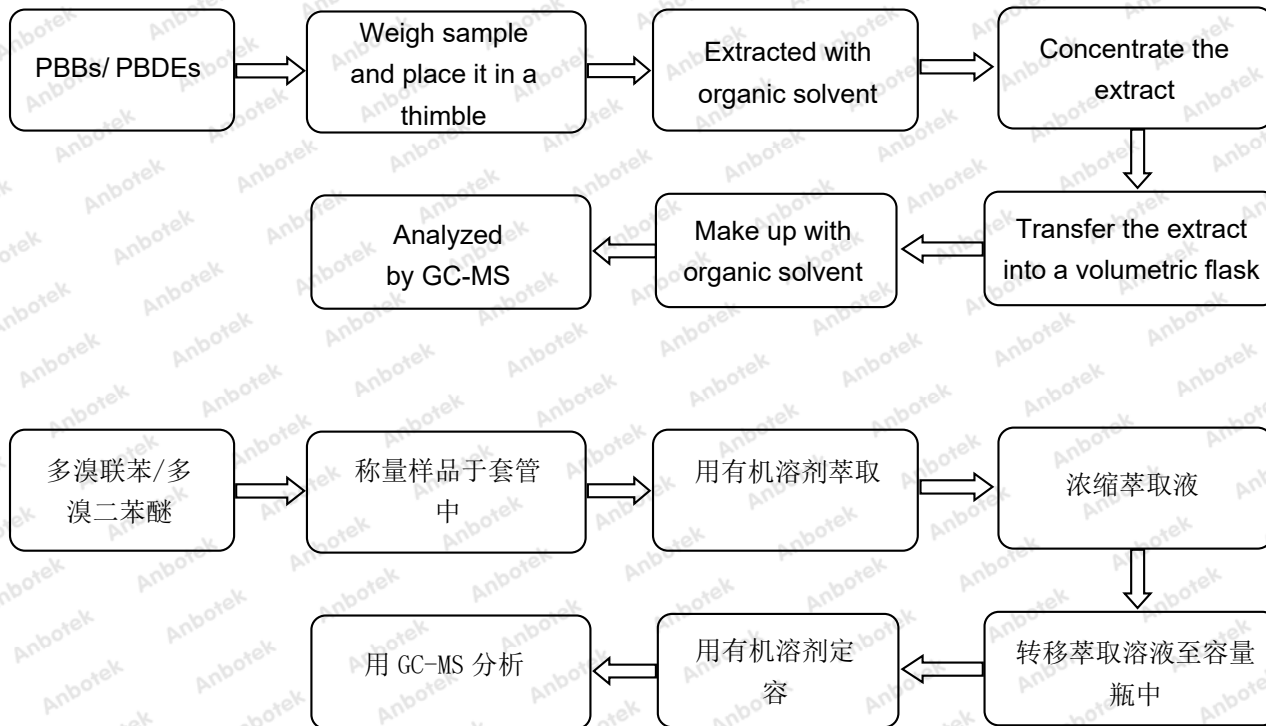
Page 8 of 9

报告编号: 18300RC10148501

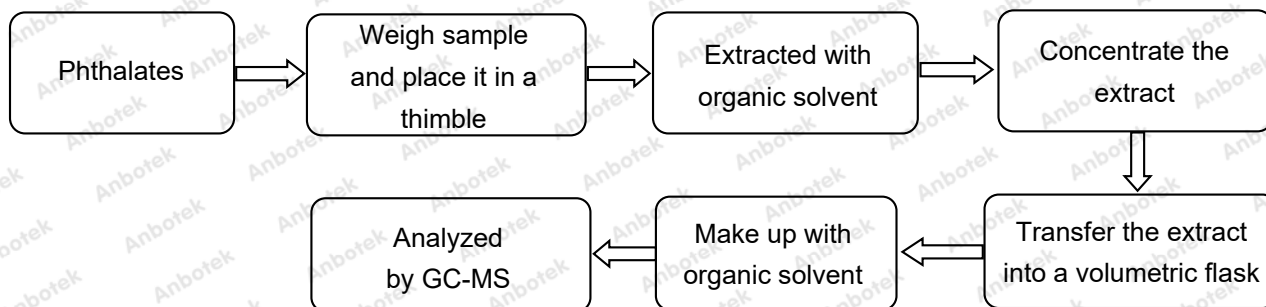
日期: 2021年04月21日

页数: 第8页共9页

◆ IEC 62321-6:2015



◆ IEC 62321-8:2017



Test Report

检测报告

Report No.: 18300RC10148501

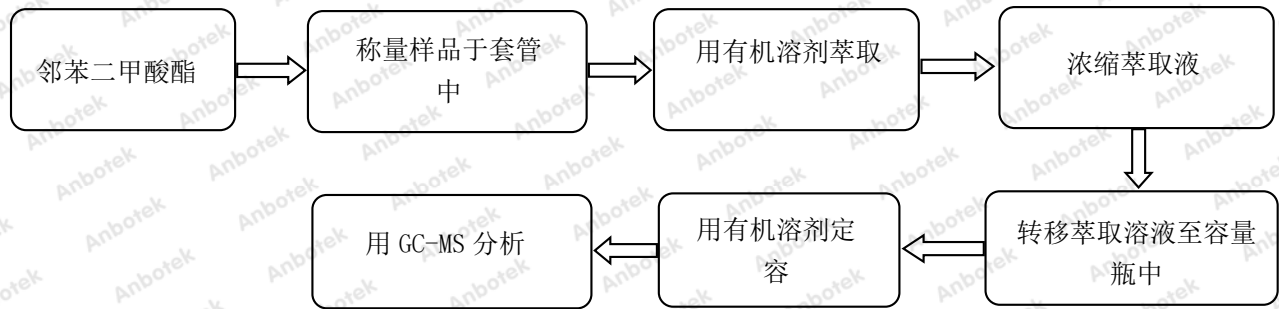
Date: Apr. 21, 2021

Page 9 of 9

报告编号: 18300RC10148501

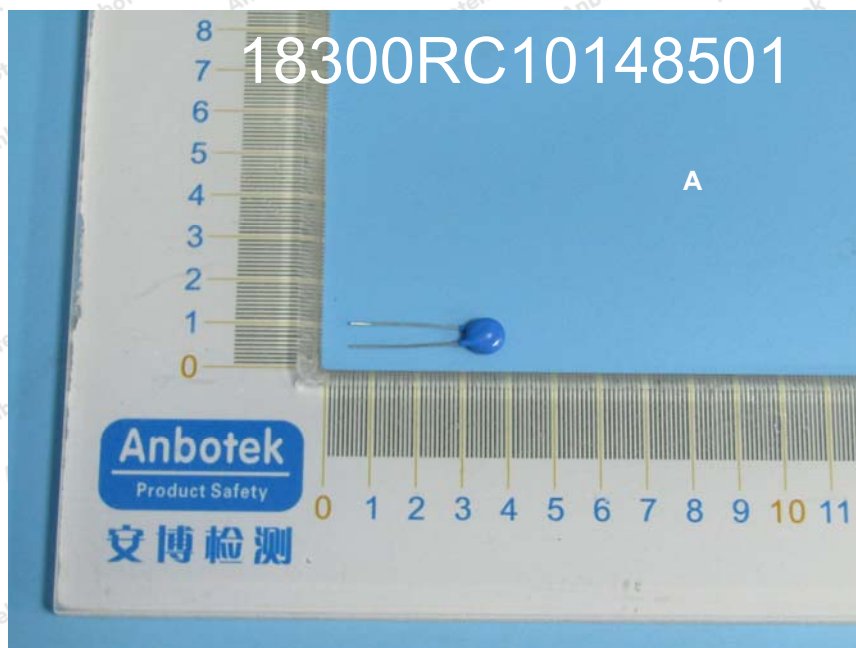
日期: 2021年04月21日

页数: 第9页共9页



Photograph of Sample

样品图片



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

***** 报告结束 *****

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of Anbotek, this report can't be reproduced except in full.

检测报告无批准人签字及“报告专用章”无效，本报告检测结果仅对受测样品负责。未经 Anbotek 书面同意，不得部分复制本报告。

