

测试报告

No. SHAEC1104701512

日期: 2011年04月15日 第1页,共11页

江苏长电科技股份有限公司
江苏省江阴市滨江中路275号

以下测试之样品是由申请者所提供及确认 : SOT-89

SGS工作编号 : SP11-010093 - SH
型号 : SOY-89
可覆盖型号 : SOT-89-3L/SOT-89-5L/SOT-89-6L
样品接收日期 : 2011年04月11日
测试周期 : 2011年04月11日 - 2011年04月15日
测试要求 : 根据客户要求测试
测试方法 : 请参见下一页
测试结果 : 请参见下一页

通标标准技术服务有限公司
授权签名



Fan Jingjie, JJ 范晶捷
批准签署人

本报告是发布日期为2011年04月15日编号为SHAEC1104701511 英文检测报告的中文译本。如有异议, 以英文版本为准。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



测试报告

No. SHAEC1104701512

日期: 2011年04月15日

第2页,共11页

测试结果:

样品部件外观描述:

样品编号	SGS样品ID	描述
1	SHA11-047015.011	黑色本体部分 (混合测*)
2	SHA11-047015.012	银色金属引脚

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

RoHS指令2002/95/EC

测试方法:

参照IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量.
- (2) 用ICP-OES测定铅的含量.
- (3) 用ICP-OES测定汞的含量.
- (4) 用紫外-可见分光光度计比色法测定六价铬的含量.
- (5) 用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚)的含量.

测试项目	限值	单位	MDL	011
镉(Cd)	100	mg/kg	2	ND
铅(Pb)	1,000	mg/kg	2	ND
汞(Hg)	1,000	mg/kg	2	ND
六价铬(CrVI)	1,000	mg/kg	2	ND
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND
一溴联苯	-	mg/kg	5	ND
二溴联苯	-	mg/kg	5	ND
三溴联苯	-	mg/kg	5	ND
四溴联苯	-	mg/kg	5	ND
五溴联苯	-	mg/kg	5	ND
六溴联苯	-	mg/kg	5	ND
七溴联苯	-	mg/kg	5	ND
八溴联苯	-	mg/kg	5	ND
九溴联苯	-	mg/kg	5	ND
十溴联苯	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



测试报告

No. SHAEC1104701512

日期: 2011年04月15日

第3页,共11页

测试项目	限值	单位	MDL	011
一溴二苯醚	-	mg/kg	5	ND
二溴二苯醚	-	mg/kg	5	ND
三溴二苯醚	-	mg/kg	5	ND
四溴二苯醚	-	mg/kg	5	ND
五溴二苯醚	-	mg/kg	5	ND
六溴二苯醚	-	mg/kg	5	ND
七溴二苯醚	-	mg/kg	5	ND
八溴二苯醚	-	mg/kg	5	ND
九溴二苯醚	-	mg/kg	5	ND
十溴二苯醚	-	mg/kg	5	ND

备注:

(1)最大允许极限值引用自2002/95/EC RoHS指令和后继修正指令2005/618/EC.

RoHS指令2002/95/EC

测试方法:

参照IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量.
- (2) 用ICP-OES测定铅的含量.
- (3) 用ICP-OES测定汞的含量.
- (4) 用点测试法/紫外-可见分光光度计比色法测定六价铬的含量.

测试项目	限值	单位	MDL	012
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1,000	mg/kg	2	18
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(CrVI)	-	-	◇	Negative

备注:

(1) 最大允许极限值引用自2002/95/EC RoHS指令和后继修正指令2005/618/EC.

(2) ◇ 点测试法:

Negative= 镀层中未检测到六价铬, **Positive** = 镀层中检测到六价铬;

(当点测试结果为**Negative**或无法确定时,将采用沸水萃取法作进一步的结果验证.)

◇ 沸水萃取法:

Negative = 镀层中未检测到六价铬

Positive = 镀层中检测到六价铬; 表明50 cm²表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于0.02 mg/kg.

针对金属表面的防腐涂层: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代表测试时样品的状态.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



邻苯二甲酸盐(或酯)

测试方法: 参照EN 14372: 2004的方法测定, 采用GC-MS进行分析.

测试项目	单位	MDL	011
邻苯二甲酸二丁酯(DBP)	%	0.003	ND
邻苯二甲酸丁酯苜酯(BBP)	%	0.003	ND
邻苯二甲酸二(2-乙基己基) (DEHP)	%	0.003	ND
邻苯二甲酸二异壬酯 (DINP)	%	0.010	ND
邻苯二甲酸二正辛酯 (DNOP)	%	0.003	ND
邻苯二甲酸二异癸酯 (DIDP)	%	0.010	ND
邻苯二甲酸二正己酯(DnHP)	%	0.003	ND

备注:

(1) DBP, BBP, DEHP 参考信息: 1907/2006/EC Reach 附录XVII的修正指令——552/2009/EC 第51条 (前身为2005/84/EC) 的要求:

- i) 不允许DBP, BBP, DEHP 质量浓度高于0.1%的可塑性物料用于玩具和儿童护理品.
- ii) 当玩具和儿童护理品中的可塑性物料含DBP, BBP, DEHP 质量浓度高于0.1%时,不得投放市场. 详细信息请参见Regulation (EC) No 552/2009

DINP, DNOP, DIDP 参考信息: 1907/2006/EC Reach 附录XVII的修正指令——552/2009/EC 第52条 (前身为2005/84/EC) 的要求:

- i) 不允许DINP, DNOP, DIDP 质量浓度高于0.1%的可塑性物料用于可放入儿童口中的玩具和儿童护理品.
- ii) 当可放入儿童口中的玩具和儿童护理品中的可塑性物料含DBP, BBP, DEHP 质量浓度高于0.1%时,不得投放市场.

详细信息请参见Regulation (EC) No 552/2009

多环芳香烃(PAH)

测试方法: 参照ZEK 01.2-08 及其后续指令, 采用 GC-MS进行分析.

测试项目	单位	MDL	011
16项多环芳香烃总和	mg/kg	-	ND
萘 (NAP)	mg/kg	0.2	ND
苊烯(ANY)	mg/kg	0.2	ND
苊(萘嵌戊烷) (ANA)	mg/kg	0.2	ND
芴 (FLU)	mg/kg	0.2	ND
菲 (PHE)	mg/kg	0.2	ND
蒽 (ANT)	mg/kg	0.2	ND
荧蒽 (FLT)	mg/kg	0.2	ND

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



测试报告

No. SHAEC1104701512

日期: 2011年04月15日

第5页,共11页

测试项目	单位	MDL	011
芘 (PYR)	mg/kg	0.2	ND
苯并(a)蒽 (BaA)	mg/kg	0.2	ND
屈 (CHR)	mg/kg	0.2	ND
苯并(b)荧蒽 (BbF)	mg/kg	0.2	ND
苯并(k)荧蒽 (BkF)	mg/kg	0.2	ND
苯并(a)芘 (BaP)	mg/kg	0.2	ND
茚并(1,2,3-c,d)芘 (IPY)	mg/kg	0.2	ND
二苯并(a,h)蒽(DBA)	mg/kg	0.2	ND
苯并(g,h,i)茚(二萘嵌苯) (BPE)	mg/kg	0.2	ND

ZEK 01. 2-08: 产品最大控制值

参数	1 类	2 类	3 类
	设计意图为放入口中的材料, 以及36个月以下幼儿的玩具上与皮肤接触的材料	未在1类规定中涵盖的材料, 且可能与皮肤长期接触的材料(接触时间大于30秒)	未在1和2类规定中涵盖的材料, 且可能与皮肤短期接触的材料(接触时间小于等于30秒)
BaP含量 (mg/kg)	不得检测到(< 0.2)***	1	20
16种 PAH (EPA) 总量 (mg/kg)**	不得检测到(< 0.2)***	10	200

备注: ** = 仅物质浓度大于0.2ppm时才用于计算16项PAH总量

*** = 若设计意图为放入口中的材料的测试结果大于1类限值但不超过2类限值, 需再依据DIN EN 1186ff及 § 64 LFGB 80. 30-1进行PAH的迁移性测试并根据相关食品法规进行判定。

全氟辛烷磺酰基化合物(PFOS)和全氟辛酸(PFOA)

测试方法: 参照US EPA 3550C: 2007 方法测定, 采用HPLC-MS进行分析.

测试项目	单位	MDL	011
全氟辛烷磺酰基化合物 (PFOS)- 酸,金属盐和酰胺	mg/kg	10	ND
全氟辛酸 (PFOA)	mg/kg	10	ND

测试项目	单位	MDL	012
全氟辛烷磺酰基化合物 (PFOS)- 酸,金属盐和酰胺	mg/kg	10	ND
全氟辛酸 (PFOA)	mg/kg	10	ND

备注:

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

- (1) PFOS 参考信息: 1907/2006/EC Reach 附录XVII的修正指令——552/2009/EC 第53条 (前身为2006/122/EC)
- (i) PFOS作为纯物质或者制备原料时,若浓度大于等于0.005%(重量)则不可以投放市场。
- (ii) PFOS用于半成品、成品或零部件时,若浓度大于等于0.1%(参照明确含有PFOS结构或者微结构部分重量计算)则不可以投放市场; 对于纺织品或其它涂层材料,若PFOS的含量大于或等于 $1\mu\text{g}/\text{m}^2$ (相对于涂层部分)则不可以投放市场。
- 详细信息请参见Regulation (EC) No 552/2009

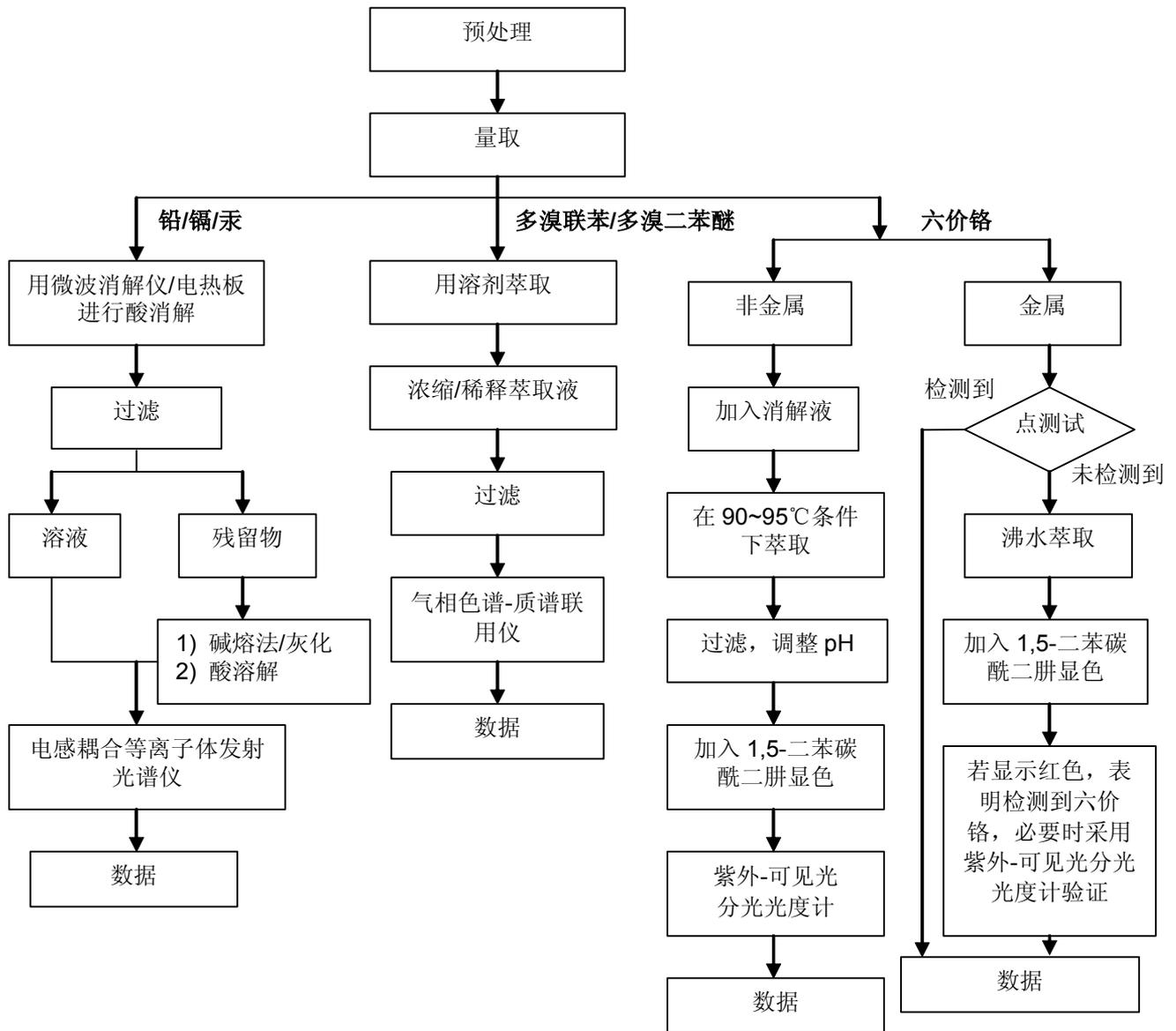
备注: *样品基于申请人要求为混合测试。报告中的混合测试结果不代表其中个别单一材质的含量,该测试数据仅供参考

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

附件

RoHS 测试流程图

- 1) 分析人员: 施青/徐双/肖飞/徐刚
- 2) 项目负责人: 张春华/徐亮/林以琳
- 3) 样品按照下述流程被完全消解(六价铬和多溴联苯/多溴二苯醚测试除外)。

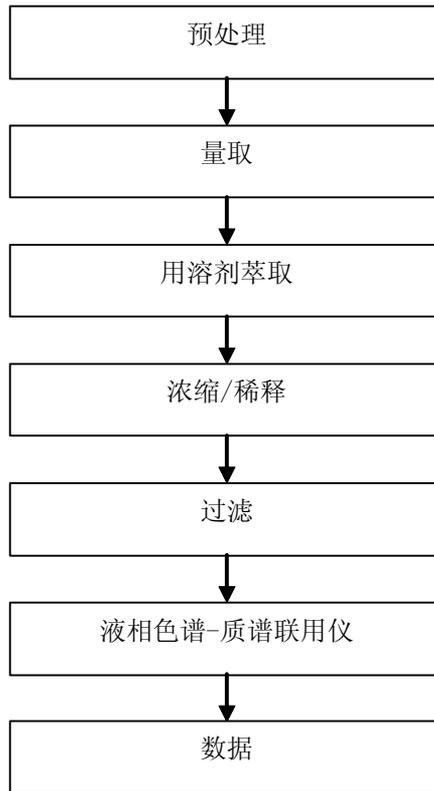


This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



PFOS/PFOA 测试流程图

- 1) 分析人员: 李晓茹
- 2) 项目负责人: 杜柏桥

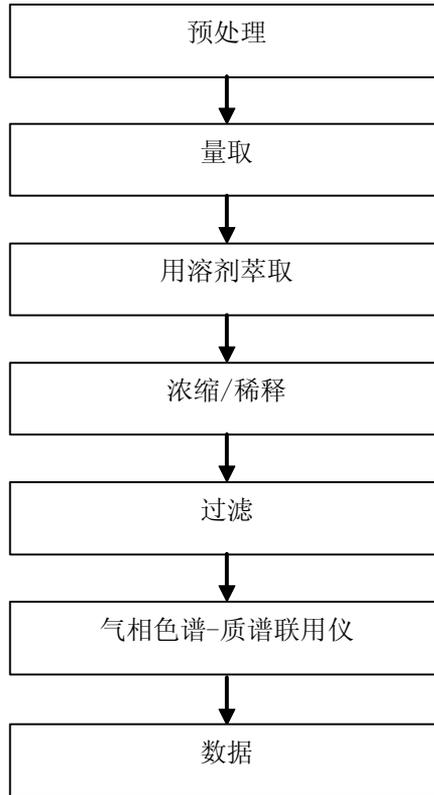


This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



PAHs 测试流程图

- 1) 分析人员: 王天增
- 2) 项目负责人: 林以琳

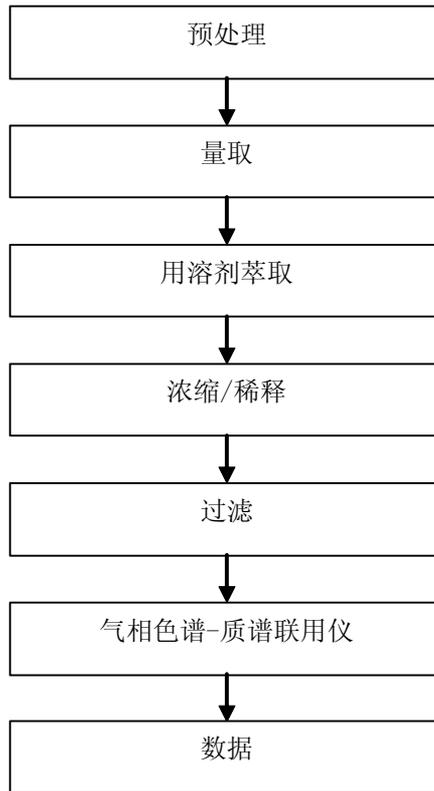


This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



Phthalates 测试流程图

- 1) 分析人员: 桂小英
- 2) 项目负责人: 刘娟



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



样品照片:



此照片仅限于随SGS正本报告使用

*** 报告完 ***

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.