

ICP Test Report Certification Packet

Company name:	Littelfuse, Inc.
Product Series:	Block Holder
Product #:	0LD04013Z Series
Issue Date:	July 28, 2010
2002/95/EC)-restricted s packing/packaging mater In addition, it is hereby refor unit parts, the packing/	by Littelfuse, Inc. that there is neither RoHS (EU Directive ubstance nor such use, for materials to be used for unit parts, for ials, and for additives and the like in the manufacturing processes. ported to you that the parts and sub-materials, the materials to be used packaging materials, and the additives and the like in the manufacturing sed of the following components.
	Issued by: KRISTEEN BACILA <globa ehs="" engineer=""></globa>
(1) Parts, sub-materials a This document c manufactured by L	overs the Low Profile J Case RoHS-Compliant series products
< Raw Materials L Please see Tab	
(2) The ICP data on all Please see app	measurable substances propriate pages as identifed in Table 1
Remarks :	



Table 1: List of Raw Materials covered by this report

Total Parts	Raw Material Part Number	Raw Material Description	Page(s)
1	PF2A5-151J(b)	Molding Compound - Base	3-7
2	6063-T5	Aluminum Block	8-10
3	6063-T5	Aluminum – Hexagon Screw	8-10
4	NA	Sn – Steel Screw Component	11-13
5	NA	Zn – Steel Screw Component	14-16
6	NA	Steel	17



No. SHAEC1001799805

Date: 08 Mar 2010

Page 1 of 5

Changshu South East Plastic Co.,Ltd

Shanming Road, Dayi Town, Changshu City, Jiangsu Province

The following sample(s) was/were submitted and identified on behalf of the clients as: Phenolic Moulding Compound

SGS Job No.

SP10-005069 - SH

Model No.:

PF2A5-151J(b)

Composition:

Phenolic Resin, Wood Flour, Mineral

Date of Sample Received :

03 Mar 2010

Testing Period :

03 Mar 2010 - 08 Mar 2010

Test Requested.

Selected test(s) as requested by client.

Test Method

Please refer to next page(s).

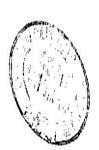
Test Results :

Please refer to next page(s).

Conclusion:

Based on the performed tests on submitted samples, the results comply with the

RoHS Directive 2002/95/EC and its subsequent amendments.



Signed for and on behalf of SGS-CSTC Ltd.

Sandy Keo

Hao Jinyu, Sandy Lab Manager

SGS

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No. SHAEC1001799605

Date: 08 Mar 2010

Page 2 of 5

Test Results :

Test Part Description ;

SGS Sample ID Specimen No. Description SHA10-017996.005 Black Solid Pellet

Remerks.

(1) 1 mg/kg = 1 ppm = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected (< MDL)

(4) "-" = Not Regulated

RoHS Directive 2002/95/EC

Test Method: With reference to IEC 62321:2008

(1) Determination of Cadmium by ICP-OES.

(2) Determination of Lead by ICP-OES.

(3) Determination of Mercury by ICP-OES.

(4) Determination of Hexavalent Chromlum by ColorImetric Method using UV-Vis.

(5) Determination of PBBs / PBDEs content by GC-MS.

Test Hem(s)	<u> Ļimit</u>	<u>Unit</u>	MDL	<u>005</u>
Cadmlum (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	NĎ
Hexavalant Chromium (CrVI)	1,000	mg/kg	2	ND
Sum of PBBs	1,000	mg/kg	•	ND
Monobramobiphenyl		mg/kg	5	ND
Dibromobiphenyl	¥	mg/kg	5	NĎ
Tribromobiphenyl	-	mg/kg	5	NO
Tetrabromoblphenyl	¥	mg/kg	5	NO
Pentabromoblphenyl		mg/kg	5	ND
Hexabromobiphenyl	¥	mg/kg	5	ND
Heptabromobiphenyl	ì	mg/kg	5	ND
Octabromobiphenyl	*	mg/kg	5	ND
Nonabromobiphenyl	5	mg/kg	5	ND
Decebromobiphenyl	•	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	2	ND
Monobromodiphenyl ether	•	mg/kg	5	ND

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総算 200233 HL (60-21) 61402594 HL (66-21) 54500353 も sps.chimi@hys.com



Test Report	No. SHAEC10017996	05	Date: 08	Mer 2010	Page 3 of 5
Test Itom(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>	
Dibromodiphenyl ether	# TOOLS	mg/kg	5	ND	
Tribromodiphenyl ether		mg/kg	5	ND	
Tetrabromodiphenyl ether		mg/kg	5	ND	
Pentabromodiphenyl ether		mg/kg	5	ND	
Hexabromodiphenyl ether	27 •	mg/kg	5	ND	
Haptabromodiphenyl ether		mg/kg	5	ND	
Octabromodiphenyl ethar	7	mg/kg	5	ND	
Nonebromodiphenyl ether		mg/kg	5	ND	
Decabromodiphenyl ether	:	mg/kg	5	ND	

Notes:

(1) The maximum permissible limit is quoted from the document 2005/618/EC amending RoHS directive 2002/95/EC

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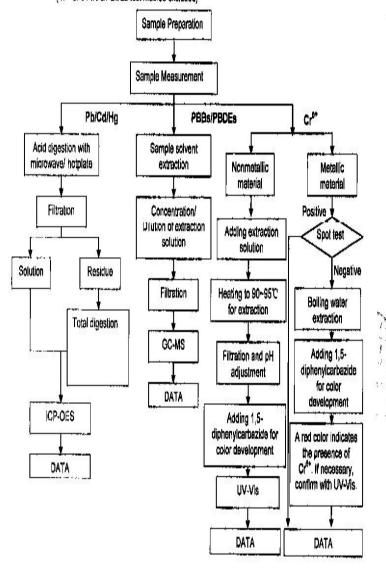
No. SHAEC1001799605

Date: 08 Mar 2010

Page 4 of 5

ATTACHMENTS

- 1) Name of the person who made measurement Damon Han/ Frank Fang/Spring Zuo/Ellm Lin
- 2) Name of the person in charge of measurement: Terry Wang/Phoebe Shen
- These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr^{6*} and PBBs/PB0Es test method excluded)



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No. SHAEC1001799605

Date: 08 Mar 2010

Page 5 of 5

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***

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TEST REPORT

Report No.:

CHB(B)09092701386

Application No.: CHB(Y)09091386

Page 1 of 3

Applicant Name:

WENZHOU JIANDA ELECTRONICS CO.,LTD

Applicant Address:

NO.2 WANGCUN INDUSTRIAL ZONE,BEIBAIXIANG TOWN,YUEQING CITY

The following information was submitted and identified by/on behalf of the client:

Sample Name

Aluminum Material

Sample Model

6063-T5

Material

Manufacturer Supplier

Deliverer

Ouantity of sample

1 pcs

Receiving Date

: Sep.02,2009

Testing Period

Sep.02,2009- Sep.04,2009

Testing Category

: Applicant Testing

Test Requested

In accordance with RoHS Directive 2002/95/EC and amendment of RoHS, To determine

Cadmium, Lead, Mercury and Hexavalent Chromium content on the submitted sample.

Test Method

With reference to IEC 62321:2008

Clause 7 Determination of mercury in polymers, metals and electronics

Clause 9 Determination of lead and cadmium in metals

Annex B Test for the presence of hexavalent chromium in colourless and coloured

corrosion-protected coatings on metals

Test Instrument

To determine Cadmium, Lead and Mercury by ICP-OES

To determine Hexavalent Chromium by UV-Vis

Testing Results

Please refer to next page

Conclusion

Based on the performed test on submitted samples, the results comply with RoHS Directive

2002/95/EC and amendment of RoHS.

Written by 张园园

Inspected by

Approved by

Date

www.chb-zhongce.com

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TEST REPORT

Report No.:

CHB(B)09092701386

Application No.: CHB(Y)09091386

Page 2 of 3

Testing Results:

Item	Unit	Method	MDL	A Result
Cadmium(Cd)	mg/kg	IEC 62321:2008 Clause 9	2 -	ND
Lead(Pb)	mg/kg	IEC 62321:2008 Clause 9	2	ND
Mercury(Hg)	mg/kg	IEC 62321:2008 Clause 7	2	ND
Hexavalent Chromium(CrVI)	mg/kg	IEC 62321:2008 Annex B	2	Negative

Sample Description:

Aluminum Material

Note:

- 1.mg/kg=ppm
- 2.MDL=Method Detection Limit
- 3.ND=No Detected(<MDL)
- 4."-"= Not Regulated or Not Applicable
- 5. Negative = Absence of Cr(VI) coating

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TEST REPORT

Report No.:

CHB(B)09092701386

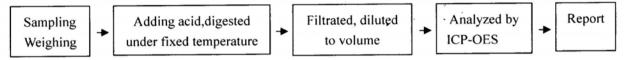
Application No.:

CHB(Y)09091386

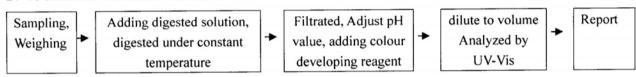
Page 3 of 3

Testing Flow:

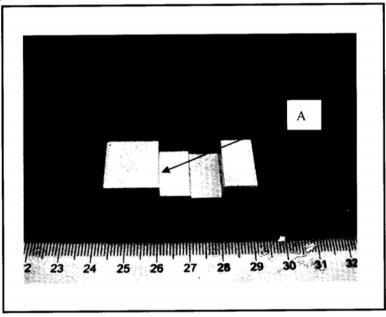
1. To determine Cadmium, Lead and Mercury Content:



2. To determine Hexavalent Chromium Content:



Annex: Sample Photo



CHB authenticate the photo on original report only. In the event of any doubt, the client must give written notice to CHB within 15 days after receiving the report. This report is invalid if partly or all transferred, tampered, altered, fabricated or copied. The original report is invalid without CHB special report seal and signature. The electronic version is for reference only without CHB special report seal.

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No. SHAEC1000322204

日期: 2010年01月19日 第1页,共4页

乐精市精饰电镀厂

浙江省东清市北白象镇象塔南路42号

以下测试之样品是由中销者所提供及确认: 镀锡层

SGS工作编号:

SP10-000866 - SH

样品接收日期:

2010年01月14日

测试周期:

2010年01月14日 - 2010年01月19日

剃式要求;

根据客户要求测试

测试方法:

讨参见下一页

测试结果;

诸参见下一页

结论:

基于所送样品进行的测试。测试结果与欧盟RoHS指令2002/95/EC以及后续修正指

令的要求相符。



No. SHAEC1000322204

日期: 2010年01月19日 第2页,共4页

测试结果:

样品部件外观描述:

样品编号

SGS样品ID

描述

SHA10-003222.004

银色金属

备注:

it: CN Docoheck@sgs.com

755183071443 611

(1) 1 mg/kg = 1 ppm = 0.0001%

(2) MDL = 检测极限值

(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) 用点测试法/比色法测定六价铬的含量.

测试项目	<u>限值</u>	单位	MDL	004
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1,000	mg/kg	2	9
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(CrVI)			\Diamond	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 \pm 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.

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No. SHAEC1000322204

日期: 2010年01月19日

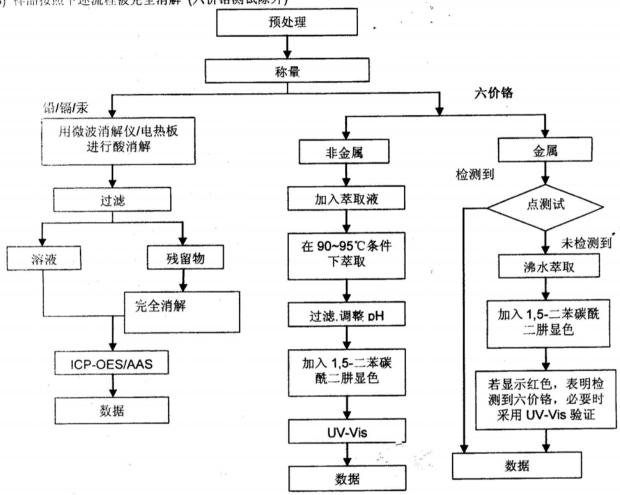
第3页,共4页

附件

1) 分析人员: 张春华/ 徐双/方何裔

2) 项目负责人: 王卫

3) 样品按照下述流程被完全消解 (六价铬测试除外)



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No. SHAEC1000322201

日期: 2010年01月19日 第1页,共4页

乐清市精饰电镀/ 浙江省乐清市北白象镇象塔南路42号

以下测试之样品是由申请者所提供及确认: 镀锌层

SGS 1 作编号:

SP10-000866 - SH

样品接收日期:

2010年01月14日

测试周期:

2010年01月14日 - 2010年01月19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

纵论:

基于所送样品进行的测试,测试结果与欧盟RoHS指令2002/95/EC以及后续修正指

令的要求相符。

通标标准技术服务有限公司 授权签名

Sandy How

Hao Jinyu, Sandy郝金玉实验室经理

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SHCHEM 3040193



No. SHAEC1000322201

口切: 2010年01月19日

第2页,共4页

测试结果:

样品部件外观描述:

样品编号

SGS样品ID

描述

1

SHA10-003222.001

彩色金属

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 检测极限值
- (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测定锅的含量.
- (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/比色法测定六价铬的含量。

测试项目	政位立	<u> </u>	MDL	001
(Cd)	100	mg/kg	2	ND
铅(Pb)	1,000	mg/kg	2	ND
汞 (Hg)	1,000	mg/kg	2	ND
大价铬(CrVI)	12		9	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铭, Positive = 镀层中检测到六价铭;

(治点测试结果为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.

针对金属袋面的防腐涂层: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。

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测试报告

No. SHAEC1000322201

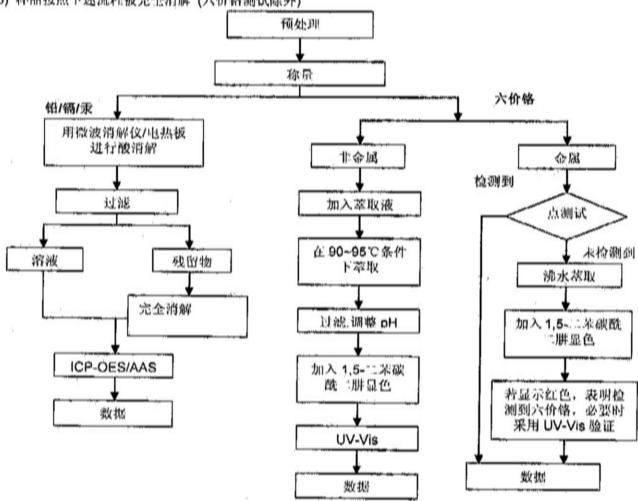
日期: 2010年01月19日 第3页,共4页

附件

1) 分析人员: 张春华/ 徐双/方何裔

2) 项目负责人: 工卫

3) 样品按照下述流程被完全消解 (六价铬测试除外)



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SMCHEM TOAGAG

浙江正泰电器股份有限公司 理化试验报告单

告单号 ZT	720100716lhgl09#001	编号 7103010	样本数	5
委托单位 温	州建达			
华品信息 螺	丝			
则试项目 Co	d镉、Pb铅、Hg汞、Cr+6六价铬。			
支术要求		测试结果 检测限: 0.0005%, 检		
d (镉) ≤0 b (铅) ≤0 g (汞) ≤0 g·r+6 (六价钌).1%).1%	检测限: 0.0005%, 检检测限: 0.0005%, 检检测限: 0.0005%, 检	测值: 0.0139% 测值: 未检出	
评定标准	RoHS指令	试验	合格	
	2010-07-15	结论	200000000	
来样日期		4 9 44 59	太结婚	
来样日期报告日期	2010-07-16	试验员 审 核	李统能 黄炳福	