ICP Test Report Certification Packet

Company name: Littelfuse, Inc.

Product Series: LSCR

Product #: LSCR001, LSCR002

Issue Date: March 12, 2011

It is hereby certified by Littelfuse, Inc. that there is neither RoHS (EU Directive 2002/95/EC)-restricted substance nor such use, for materials to be used for unit parts, for packing/packaging materials, and for additives and the like in the manufacturing processes.
In addition, it is hereby reported to you that the parts and sub-materials, the materials to be used for unit parts, the packing/packaging materials, and the additives and the like in the manufacturing processes, are all composed of the following components.

Issued by: KRISTEEN BACILA

<Global EHS Engineer>

(1) Parts, sub-materials and unit parts

This document covers the LSCR RoHS-Compliant series products manufactured by Littelfuse, Inc.

＜ Raw Materials Used

Please see Table 1

(2) The ICP data on all measurable substances

Please see appropriate 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	N/A	Base	3-7
2	N/A	Nuts, Bolts, Gasket – steel base	8
3	N/A	Nuts, Bolts, Gasket – zinc plate	9-11

SGS

Test Report

No. SHAEC1001799605 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.

Hao Jinyu, Sandy
Lab Manager

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Test Results :

Test Part Description :

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

Remarks :

(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 Chromium by Colorimetric Method using UV-Vis.

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

Test Item(s)	Limit	Unit	MDL	005
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	2	ND
Sum of PBBs	1,000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND

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MAY-28-2010 13:56 From:

Test Item(s)	Limit	Unit	MDL	005
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl 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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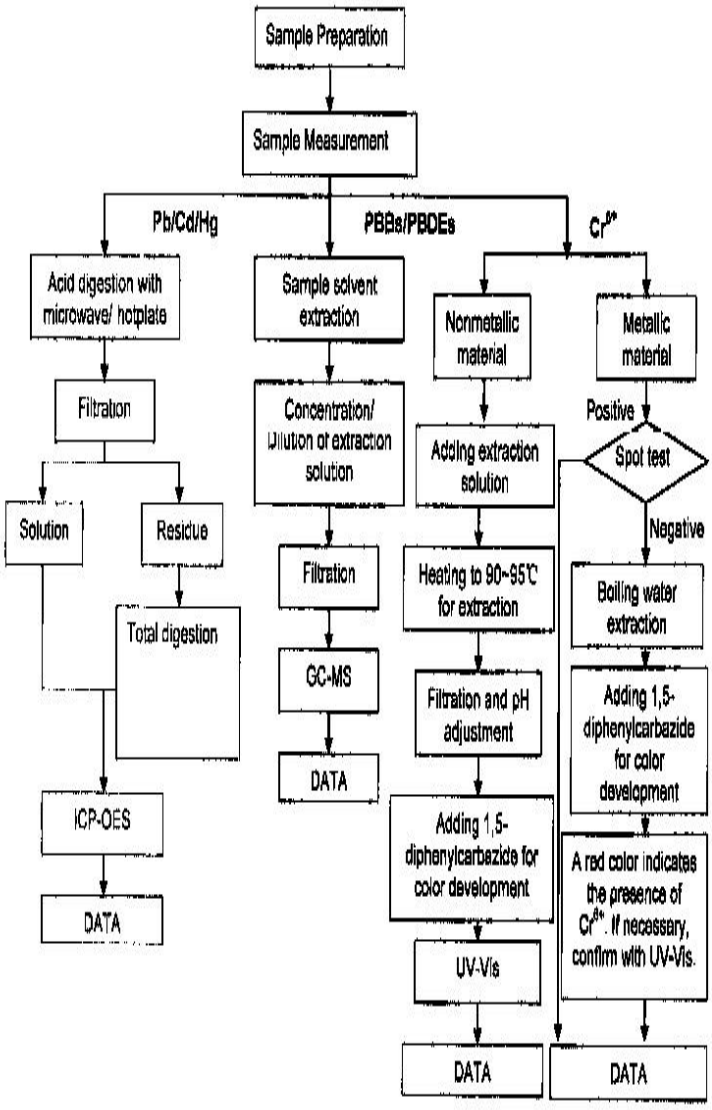
Test Report No. SHAEC1001799605 Date: 08 Mar 2010 Page 4 of 5

ATTACHMENTS

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



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Test Report No. SHAEC1001799605 Date: 08 Mar 2010 Page 5 of 5

Sample photo:



SHA10-017996.005

SGS authenticate the photo on original report only

*** End of Report ***

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浙江正泰电器股份有限公司
理化试验报告单

报告单号	ZT20090716lhgl09#001	试样编号	7003010	样本数	5
委托单位	温州建达				
样品信息	螺丝				
测试项目	Cd镉、Pb铅、Hg汞、Cr+6六价铬。				

技术要求	测试结果
Cd（镉）≤0.01% Pb（铅）≤0.1% Hg（汞）≤0.1% Cr+6（六价铬）≤0.1%	检测限：0.0005%，检测值：0.0032% 检测限：0.0005%，检测值：0.0129% 检测限：0.0005%，检测值：未检出 检测限：0.0005%，检测值：未检出

评定标准	RoHS指令	试验结论	合格
来样日期	2009-07-15		
报告日期	2009-07-16	试验员	李统能
盖　章		审　核	黄炳福

注：1、本结果仅对试样而言；2、试验结论仅对测试项目而言；3、试样保存期3个月。

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测试报告

No. SHAEC1000322201 日期: 2010年01月19日 第1页,共4页

乐清市精饰电镀厂
浙江省乐清市北白象镇象塘南路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
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
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。

通标标准技术服务有限公司
授权签名

Sandy Hao

Hao Jinyu, Sandy郝金玉
实验室经理

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Member of the SGS Group (SGS SA)

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测试报告

No. SHAEC1000322201 日期: 2010年01月19日 第2页,共4页

测试结果：

样品部位外观描述：

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	限值	单位	MDL	*001*
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)	-	-	◇	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 cm^2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.

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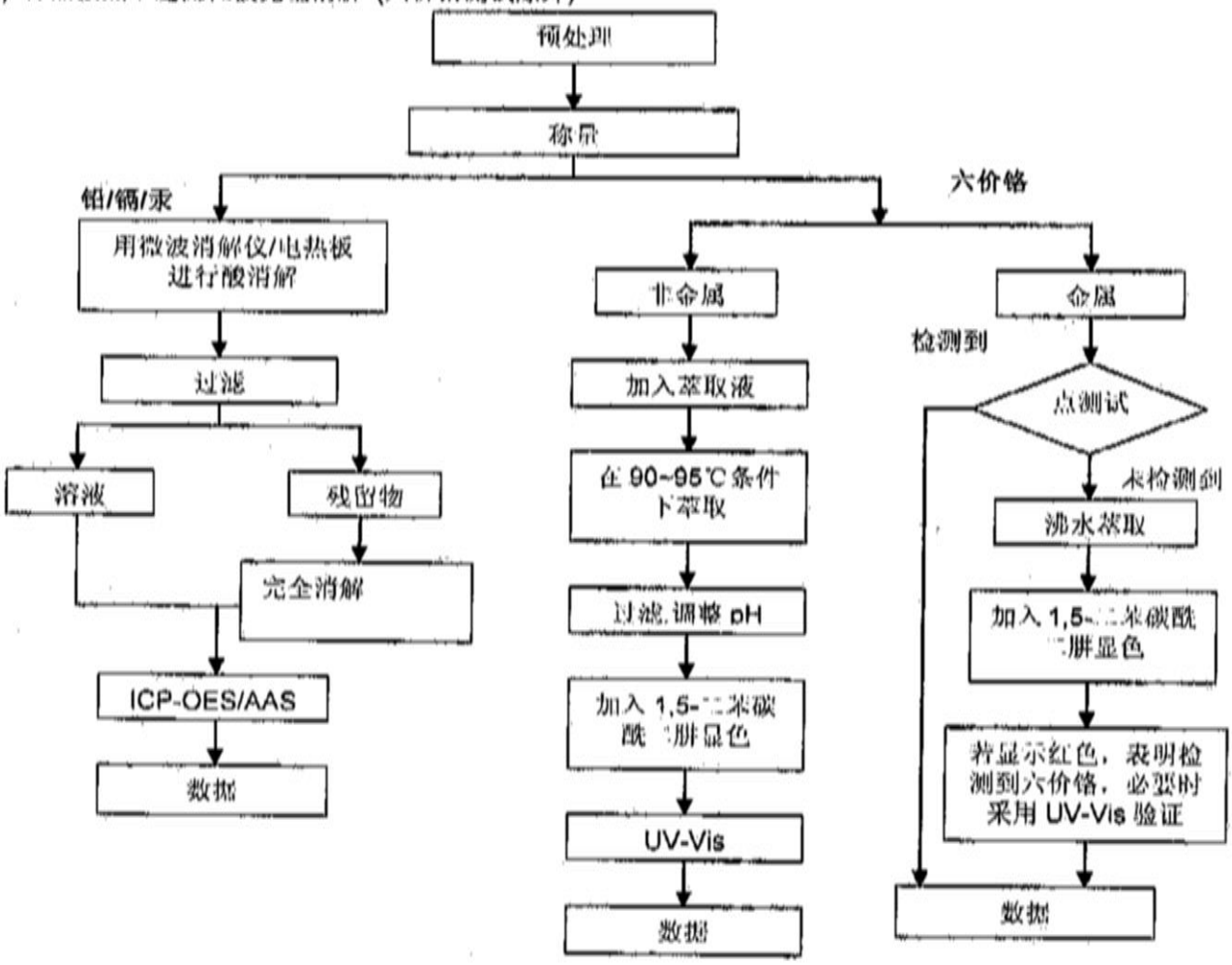
测试报告 No. SHAEC1000322201 日期: 2010年01月19日 第3页,共4页

附件

1) 分析人员: 张粹华/ 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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