



ICP Test Report Certification Packet

Company name: Littelfuse, Inc.

Product Series: Clip

Product #: 04450001N/ 044500023N/ 10207101009 series

Issue Date: November 20, 2012

It is hereby certified by Littelfuse, Inc. that there is neither RoHS (EU Directive 2002/95/EC, 2011/65/EU)-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 04450001N/ 044500023N/ 10207101009 series
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 identified 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	C2680	Brass	3-6
2	NA	Tin/ Nickel Plating	7-10



測試報告 Test Report

號碼(No.) : CE/2011/C4740

日期(Date) : 2011/12/30

頁數(Page): 1 of 4

第一伸銅科技股份有限公司

FIRST COPPER TECHNOLOGY CO., LTD.

高雄市前金區中正四路170號

NO. 170, CHUNG CHENG 4TH ROAD, KAOHSIUNG, TAIWAN, R. O. C.



以下測試樣品係由客戶送樣，且由客戶聲稱並經客戶確認如下 (The following samples was/were submitted and identified by/on behalf of the client as):

樣品名稱(Sample Description) : BRASS (黃銅)
樣品型號(Style/Item No.) : C2680
收件日期(Sample Receiving Date) : 2011/12/26
測試期間(Testing Period) : 2011/12/26 TO 2011/12/30

=====
測試需求(Test Requested) : 參照RoHS 2011/65/EU Annex II 指令要求. (In accordance with the RoHS Directive 2011/65/EU Annex II).

測試結果(Test Results) : 請見下一頁 (Please refer to next pages).


Nicole Chien, Supervisor
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei

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測試結果(Test Results)

測試部位(PART NAME)No.1 : 黃銅色金屬片 (BRASS METAL SHEET)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No.1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321: 2008方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg		2	17
汞 / Mercury (Hg)	mg/kg		2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI)	**	參考IEC 62321: 2008方法, 以沸水萃取法檢測. / With reference to IEC 62321: 2008 and performed by Boiling water extraction Method.#	#	Negative

備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n.d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. ** = Qualitative analysis (No Unit) 定性分析(無單位)
5. # = a. Positive means the presence of CrVI on the tested areas
(Positive表示測試區域偵測到六價鉻)
b. Negative means the absence of CrVI on the tested areas
(Negative表示測試區域未偵測到六價鉻)

The detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² tested areas. / 該溶液濃度 \geq 0.02 mg/kg with 50 cm² (tested areas)

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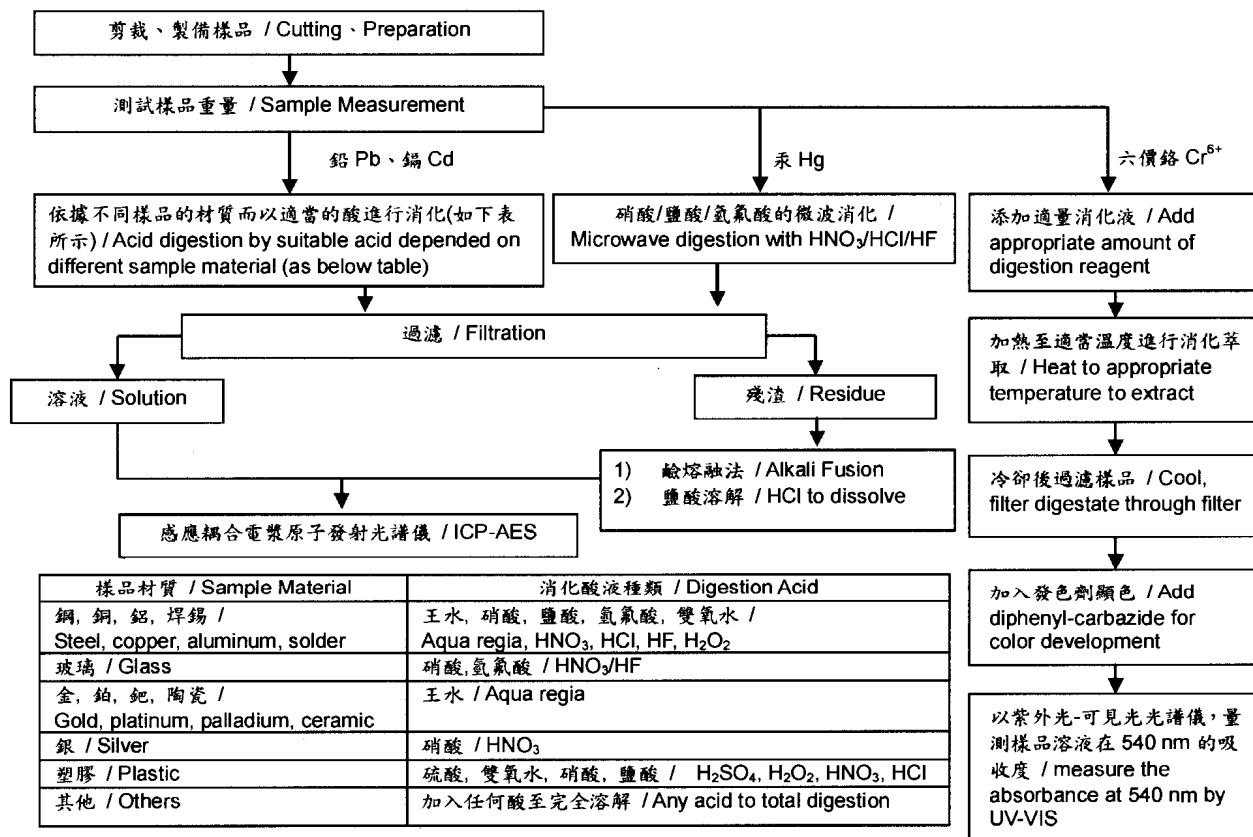
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- 1) 根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外) / These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)
- 2) 測試人員：楊登偉 / Name of the person who made measurement: Climbgreat Yang
- 3) 測試負責人：張啓興 / Name of the person in charge of measurement: Troy Chang



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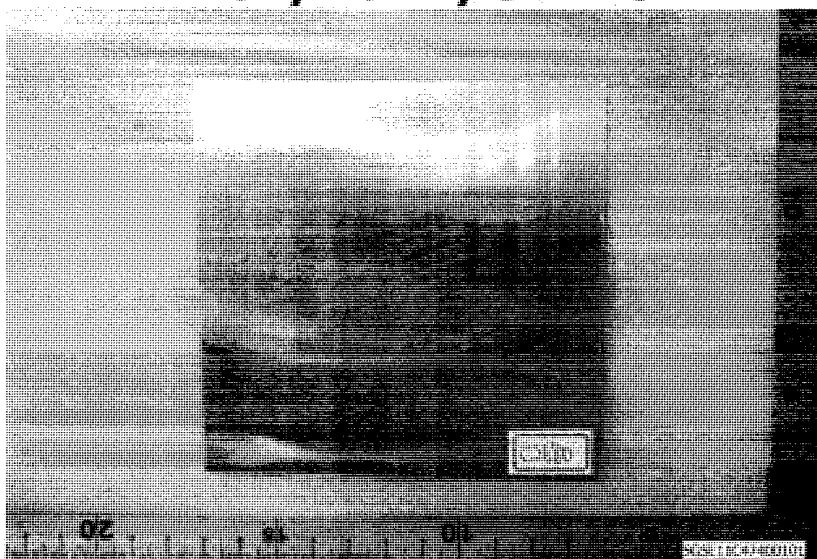
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* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。 *
(The tested sample / part is marked by an arrow if it's shown on the photo.)

CE/2011/C4740



** 報告結尾 (End of Report) **

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Test Report

No. CANEC1000663703

Date: 08 Mar 2010

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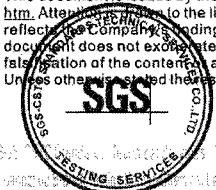
The following sample(s) was/were submitted and identified on behalf of the clients as :
Cu+Ni+Sn Electroplating Membrane

SGS Job No. : 12394134 - SZ
SGS Internal Reference No. : 4.3
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).

Signed for and on behalf of
SGS-CSTC Ltd.

Manson Yang
Sr. Engineer

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Member of the SGS Group (SGS SA)



Test Report

No. CANEC1000663703

Date: 08 Mar 2010

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Test Results:

ID for specimen 1 : CAN10-006637.002
Description for specimen 1 : Copper-colored metal sheet w/ silvery backing (plating)

Elementary Analysis

Table with 5 columns: Test Item(s), Unit, Test Method (Reference), Result, MDL. Rows include Cadmium (Cd), Lead (Pb), Mercury (Hg), and Hexavalent Chromium (CrVI) by boiling water extraction.

Note:

- 1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. ◇ = Spot-Test:
Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result is negative or cannot be confirmed.)
Boiling-water-extraction:
Negative = Absence of CrVI coating
Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.
Storage conditions and production date of the tested sample are unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.
5. "-" = Not regulated



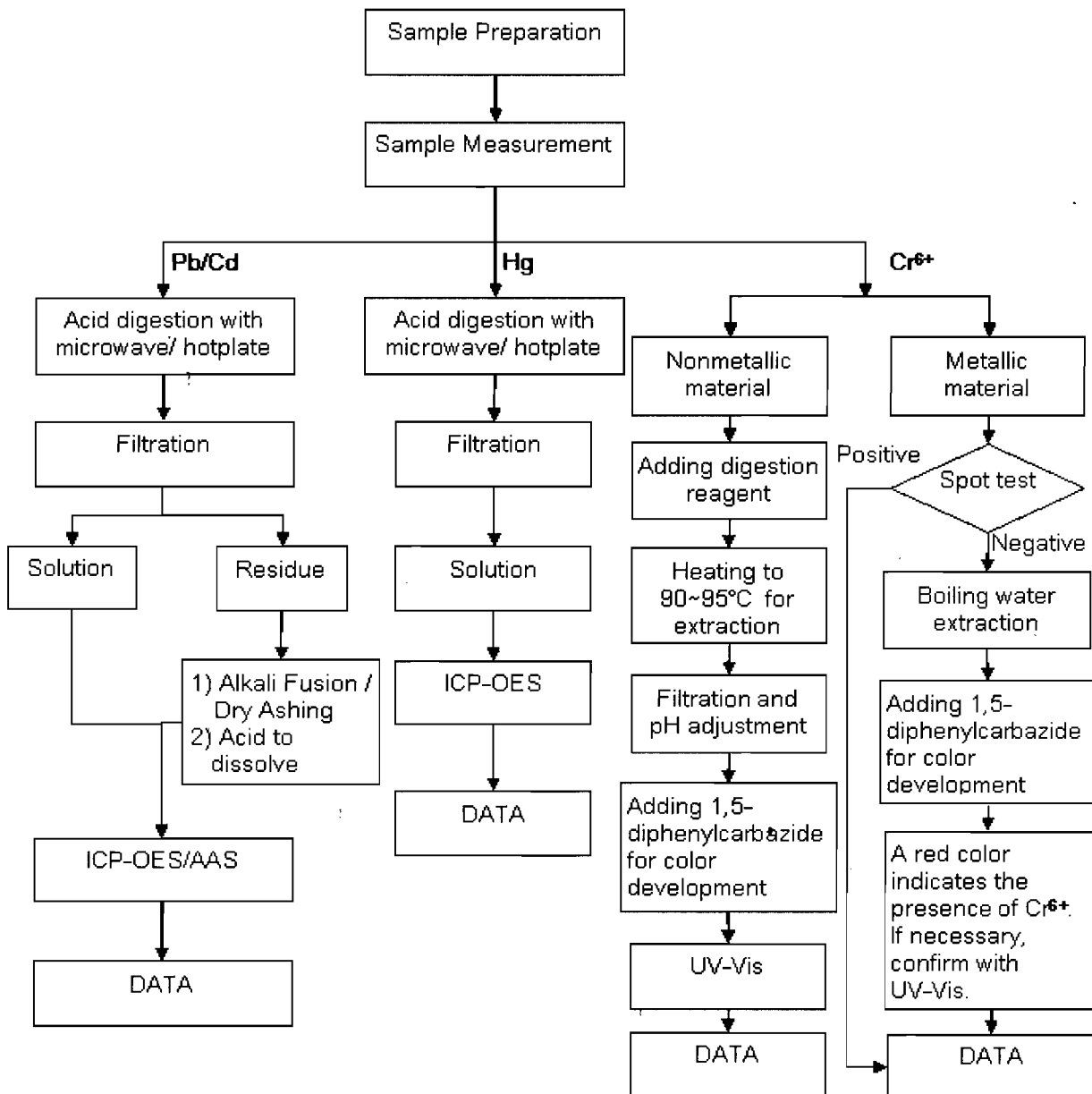
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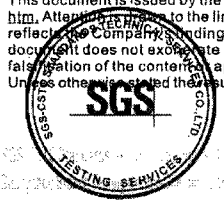
ATTACHMENTS

Testing Flow Chart

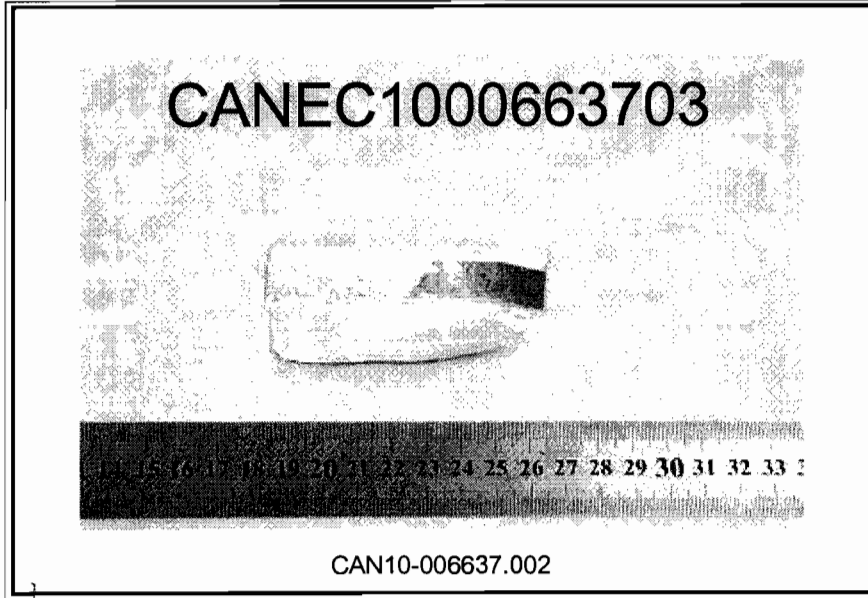
- 1) Name of the person who made measurement: Bella Wang
- 2) Name of the person in charge of measurement: Adams Yu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr⁶⁺ test method excluded).



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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



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