

號碼(No.): KA/2011/80341 日期(Date): 2011/08/10 頁數(Page): 1 of 6

日維電子股份有限公司

ZEALWAY ELECTRONICS CO., LTD.

高雄市前鎮區新衙路286-1號3樓之2

3F-2, NO.286-1, SHIN YA RD., CHYAN JENN DIST, KAOHSIUNG, TAIWAN, R.O.C.

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

樣品名稱(Sample Description) : 金屬膜固定電阻器 (METAL FILM FIXED RESISTORS)

收件日期(Sample Receiving Date) : 2011/08/04

測試期間(Testing Period) : 2011/08/04 TO 2011/08/09

送樣廠商(Sample Submitted By) : 日維電子股份有限公司 (ZEALWAY ELECTRONICS CO., LTD.)

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

Directive 2011/65/EU Annex II).

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

台灣檢驗科技股份有限公司

Ray Chang / Asst. Manage Signed for and on behalf of

SGS Taiwan Limited

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at 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. ransaction documents. This document cannot be reproduced except in lon, mislost produced to the fullest extent of the law.

SGS Talwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

t + 886 (07)301 2121 f + 886 (07)3010867 高雄市楠梓加工出口區開發路61號 www.tw.sgs.com



號碼(No.): KA/2011/80341 日期(Date): 2011/08/10 頁數(Page): 2 of 6

日維電子股份有限公司 ZEALWAY ELECTRONICS CO., LTD. 高雄市前鎮區新衙路286-1號3樓之2 3F-2, NO.286-1, SHIN YA RD., CHYAN JENN DIST, KAOHSIUNG, TAIWAN, R.O.C.

測試結果(Test Results)

測試部位(PART NAME)No.1 : 整體混測:金屬膜固定電阻器 (MIXED ALL PARTS:METAL FILM FIXED RESISTORS)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) No.1
鎬 / Cadmium (Cd)	mg/kg	参考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	n.d.
汞 / Mercury (Hg)	mg/kg		2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	参考IEC 62321: 2008方法,以UV-VIS檢測. / With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.
多溴聯苯總和 / Sum of PBBs	mg/kg	参考IEC 62321: 2008方法,以氣相層析儀/ 質譜儀檢測. / With reference to IEC 62321: 2008 and performed by GC/MS.	-	n.d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n.d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n.d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n.d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n.d.
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n.d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n.d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n.d.
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n.d.
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n.d.
十溴聯苯 / Decabromobiphenyl	mg/kg		5	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



號碼(No.): KA/2011/80341 日期(Date): 2011/08/10 頁數(Page): 3 of 6

日維電子股份有限公司

ZEALWAY ELECTRONICS CO., LTD.

高雄市前鎮區新衙路286-1號3樓之2

3F-2, NO.286-1, SHIN YA RD., CHYAN JENN DIST, KAOHSIUNG, TAIWAN, R.O.C.

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) No.1
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321: 2008方法,以氣相層析儀/ 質譜儀檢測. / With reference to IEC 62321: 2008 and performed by GC/MS.	-	n.d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n.d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n.d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n.d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n.d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n.d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n.d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n.d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n.d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg		5	n.d.
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg		5	n.d.

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. "-" = Not Regulated (無規格值)
- 5. 樣品的測試是基於申請人要求混合測試,報告中的混合測試結果不代表其中個别單一材質的含量. (The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for

rins obcurrient is sisted by the Collipany subject to Its General Conditions of Service prime deterronic 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.

SGS Taiwan Ltd.

No. 61, Kai-Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / Sda #héh#m Ltd □ 医 開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



號碼(No.): KA/2011/80341 日期(Date): 2011/08/10

頁數(Page): 4 of 6

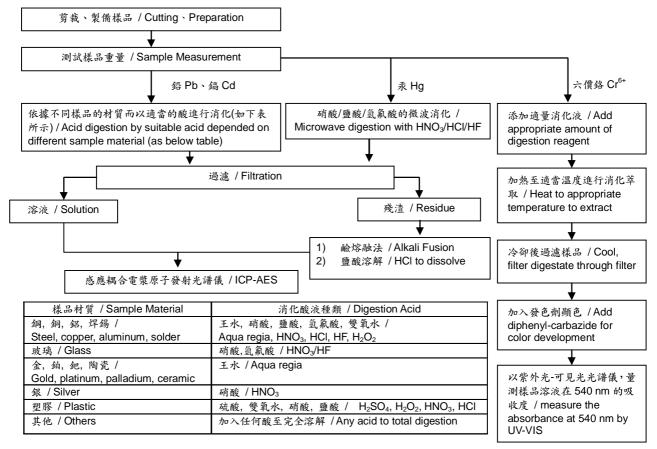
日維電子股份有限公司

ZEALWAY ELECTRONICS CO., LTD.

高雄市前鎮區新衙路286-1號3樓之2

3F-2, NO.286-1, SHIN YA RD., CHYAN JENN DIST, KAOHSIUNG, TAIWAN, R.O.C.

- 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. (Cr^{6+} test method excluded)
- 測試人員:張俊雄 / Name of the person who made measurement: Alex Chang
- 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for

rins obcurrient is sisted by the Collipany subject to Its General Conditions of Service prime deterronic 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.

SGS Taiwan Ltd.

No. 61, Kai-Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / Sda #héh#m Ltd □ 医 開發路61號

f + 886 (07)3010867



號碼(No.): KA/2011/80341

日期(Date): 2011/08/10

頁數(Page): 5 of 6

日維電子股份有限公司

ZEALWAY ELECTRONICS CO., LTD.

高雄市前鎮區新衙路286-1號3樓之2

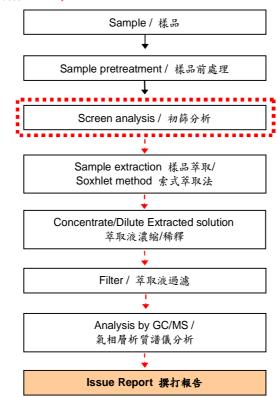
3F-2, NO.286-1, SHIN YA RD., CHYAN JENN DIST, KAOHSIUNG, TAIWAN, R.O.C.

多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員: 曹嘉琪 / Name of the person who made measurement: Anson Tsao
- 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang

初次測試程序 / First testing process _ 選擇性篩檢程序 / Optional screen process

確認程序 / Confirmation process - - - →



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for

rins obcurrient is sisted by the Collipany subject to Its General Conditions of Service prime deterronic 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.

SGS Taiwan Ltd.

No. 61, Kai-Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / Sda #héh#m Ltd □ 医 開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



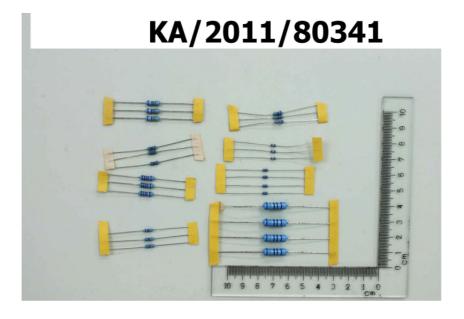
號碼(No.): KA/2011/80341 日期(Date): 2011/08/10 頁數(Page): 6 of 6

日維電子股份有限公司

ZEALWAY ELECTRONICS CO., LTD.

高雄市前鎮區新衙路286-1號3樓之2

3F-2, NO.286-1, SHIN YA RD., CHYAN JENN DIST, KAOHSIUNG, TAIWAN, R.O.C.



** 報告結尾 (End of Report) **

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for

台灣檢驗科技股份有限公司