

號碼(No.): KA/2010/10204

日期(Date): 2010/01/22

頁數(Page): 1 of 7

**Test Report** 

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)

高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. 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)

MULTI-LAYER CERAMIC CAPACITOR

樣品型號(Style/Item No.)

MLCC Y5V 0612 SERIES

收件日期(Sample Receiving Date)

2010/01/06

測試期間(Testing Period)

2010/01/06 TO 2010/01/22

測試需求(Test Requested)

參照 RoHS 2002/95/EC 及其修定指令要求. (In accordance with the RoHS

Directive 2002/95/EC, and its amendment directives).

測試方法(Test Method)

測試結果(Test Results)

請見下一頁 (Please refer to next pages).

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

SGS Taiwan Limited



號碼(No.): KA/2010/10204

日期(Date): 2010/01/22

頁數(Page): 2 of 7

# **Test Report**

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)

高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

測試方法(Test Method)

- : 参考IEC 62321: 2008方法檢測. (With reference to IEC 62321: 2008. Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products).
  - (1) 用感應藕合電漿原子發射光譜儀檢測鎘含量. / Determination of Cadmium by ICP-AES.
  - (2) 用感應藕合電漿原子發射光譜儀檢測鉛含量. / Determination of Lead by ICP-AES.
  - (3) 用感應藕合電漿原子發射光譜儀檢測汞含量. / Determination of Mercury by ICP-AES.
  - (4) 用UV-VIS檢測六價鉻含量. / Determination of Hexavalent Chromium by UV/Vis Spectrometry.
  - (5) 以氣相層析儀/質譜儀檢測多溴聯苯和多溴聯苯醚含量. / Determination of PBB and PBDE by GC/MS.

測試結果(Test Results)

: 請見下一頁 (Please refer to next pages).

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 Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>.

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. 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.



號碼(No.): KA/2010/10204

日期(Date): 2010/01/22

頁數(Page): 3 of 7



國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)

高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.



#### 測試結果(Test Results) 單位(Unit): mg/kg

測試項目 (Test Items)	測試方法 Method (Refer to)	結果 (Result) No.1	方法偵測 極限値 (MDL)
鉛 / Lead (Pb)	(2)	n.d.	2
汞 / Mercury (Hg)	(3)	n.d.	2
六價鉻 / Hexavalent Chromium Cr(VI) by	(4)	n.d.	2
alkaline extraction			
多溴聯苯總和 / Sum of PBBs	(5)	n.d.	-
一溴聯苯 / Monobromobiphenyl		n.d.	5
二溴聯苯 / Dibromobiphenyl		n.d.	5
三溴聯苯 / Tribromobiphenyl		n.d.	5
四溴聯苯 / Tetrabromobiphenyl		n.d.	5
五溴聯苯 / Pentabromobiphenyl		n.d.	5
六溴聯苯 / Hexabromobiphenyl		n.d.	5
七溴聯苯 / Heptabromobiphenyl		n.d.	5
へ溴聯苯 / Octabromobiphenyl		n.d.	5
九溴聯苯 / Nonabromobiphenyl		n.d.	5
十溴聯苯 / Decabromobiphenyl		n.d.	5
多溴聯苯醚總和 / Sum of PBDEs		n.d.	-
一溴聯苯醚 / Monobromodiphenyl ether		n.d.	5
二溴聯苯醚 / Dibromodiphenyl ether		n.d.	5
三溴聯苯醚 / Tribromodiphenyl ether		n.d.	5
四溴聯苯醚 / Tetrabromodiphenyl ether		n.d.	5
五溴聯苯醚 / Pentabromodiphenyl ether		n.d.	5
六溴聯苯醚 / Hexabromodiphenyl ether		n.d.	5
七溴聯苯醚 / Heptabromodiphenyl ether		n.d.	5
へ溴聯苯醚 / Octabromodiphenyl ether		n.d.	5
九溴聯苯醚 / Nonabromodiphenyl ether		n.d.	5
十溴聯苯醚 / Decabromodiphenyl ether		n.d.	5

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.除非另有證明,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 Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. 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.



號碼(No.): KA/2010/10204 日期(Date): 2010/01/22 頁數(Page): 4 of 7

### **Test Report**

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR) 高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

### 測試部位描述 (TEST PART DESCRIPTION):

銀色/棕色 MULTI-LAYER CERAMIC CAPACITOR (SILVER/BROWN MULTI-LAYER CERAMIC CAPACITOR)

#### 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)

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.除非另有證明,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 Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects 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. 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.



### **Test Report**

號碼(No.): KA/2010/10204 日期(Date): 2010/01/22

頁數(Page): 5 of 7

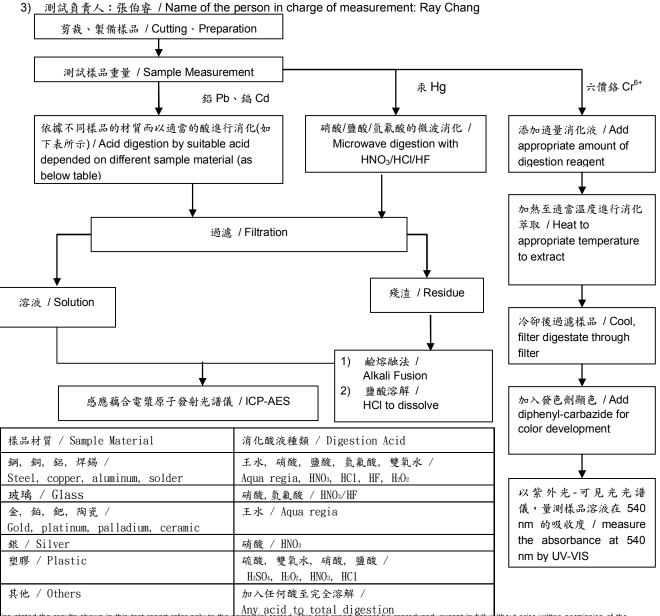
國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)

高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. 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<sup>6+</sup> test method excluded)
- 2) 測試人員: 李宏明 / Name of the person who made measurement: Hungming Li



without prior written permission of the

Offices of the was stated the results shown in this test report cannot be reproduced, except in ran, without pilot 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 Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. 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.



## **Test Report**

號碼(No.): KA/2010/10204

日期(Date): 2010/01/22

頁數(Page): 6 of 7

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)

高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

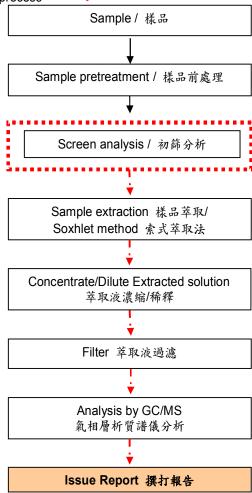
### 多溴聯苯/多溴聯苯醚 分析流程圖 / PBB/PBDE analytical FLOW CHART

1)測試人員:曹嘉琪 / Name of the person who made measurement: Anson Tsao 2)测試負責人: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

Offices otherwise stated the results showl in this test report carried be reproduced, except in full, without print written permission of the Company.除非另有說明,此報告結果懂對測式之樣品負責。本報告未經本公司書面許可,不可部分複製。
This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. 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.



號碼(No.): KA/2010/10204

日期(Date): 2010/01/22

頁數(Page): 7 of 7

# **Test Report**

國巨股份有限公司楠梓分公司(國巨/飛元/華亞) YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR) 高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. 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.除非另有證明,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 Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at <a href="http://www.sgs.com/terms\_and\_conditions.htm">http://www.sgs.com/terms\_and\_conditions.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects 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. 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.