

# 承 認 書

## APPROVAL SHEET

發行日期： 2018/06/01


料 號： 51000-024450-RS

品 名： QNAP\_x\_Panasonic\_BlueGlacier\_P8\_(EN)\_51000-024450-RS\_201804\_A

規 格： 21X29.7cm

廠 商： 展旺文具印刷品行

廠商料號： 20180601QNAP

AUTHORIZED		SIGNATURE	
			
文館中心	研發主管	研發工程師	廠商確認

威聯通科技股份有限公司

QNAP Systems, Inc.

新北市 221 汐止區 中興路22號2樓

2F, No.22, Zhongxing Rd, Xizhi Dist, New Taipei City, 221, Taiwan, R.O.C.

Tel : +886-2-2641-2000 Fax : +886-2-2641-0555

# 承認書規格表

料號	51000-024450-RS	材質	封面-雪銅150P 內頁-雪銅150P
版本	EN-A版	印刷	正四反四
尺寸	21x29.7cm	裝訂	騎馬釘(左翻)
頁數	8頁	上光	封面-局部光 封面封底內頁-上水消光

## 原始圖檔:

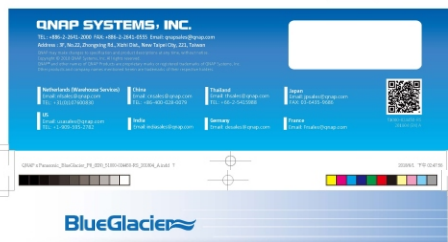


BlueGlacier Tiering Archive Storage			
Item	Starting Set	Optional Extension Kit	Optional Extension Kit
Description	Storage Gateway, Optical Disc Module Set	Storage Gateway JBOD	Optical Disc Module with Drive
Model Number	BGA-FB5-5501	NEOP-1220U-RP x1	SAO-1202E
Content & Specifications	7ES-1800U x1 1800GB (15.36 TB) 4TB HDD x4 256 GB SSD x4	Bottom Module x1 Extension Module with Drive x1 Power Supply Unit x1 3.6 TB Magazine x76 Up to 1702	Extension Module with Drive x2 SAO-1202E (particular configuration) Extension Module without Drive x1 3.6 TB Magazine x76 Up to 1702
Drive Bays / Magazine Bays	SFF LFF x12 (2 Bay) SFF x1 (1 Bay)	SFF LFF x12	SFF LFF x12
Base Capacity	24 TB HDD (up to 144 TB) 1 TB SSD (up to 1772 TB)	27.5 TB (up to 960 TB)	Up to 144 TB HDD Up to 960 TB SSD
Back Units	2U	2U	2U
RAID Support	RAID 0, 1, 5, 6, 10 RAID 5, 5, 6	RAID 0, 1, 5, 6, 10 RAID 5, 5, 6	RAID 0, 1, 5, 6, 10 RAID 5, 5, 6

\* Maximum capacity is based on 12x 10TB HDD.  
\*\* All SSD configuration is available and will occupy front LFF bays and HDD capacity.  
\*\*\* All SSD configuration is available and will occupy front LFF bays and HDD capacity.

### The BlueGlacier Tiering Archive Storage Specifications and SKUs

BlueGlacier is initially available in Taiwan and Japan.  
Please contact [sales@qnap.com](mailto:sales@qnap.com) for further information.

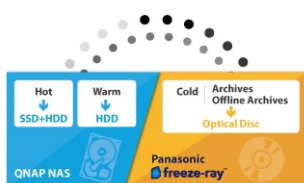


### BlueGlacier Tiering Archive Storage Highlights

BlueGlacier Tiering Archive Storage is an integrated solution comprising enterprise NAS, optical disc libraries, and software stacks, which address your requirements from primary storage to cold data storage and off-line storage. BlueGlacier is the ideal choice to secure your data across to whole lifespan and to simplify backup and archive workflows. BlueGlacier also provides the following benefits:

- **One-stop solution** — A single-tier storage solution that integrates QNAP NAS and Panasonic free-ray, an optical disc-based archive system, for diverse storage performance needs.
- **Easy-to-use** — Built-in data enterprise NAS user interface and advanced archival system eliminate data archiving obstacles.
- **Sustainable storage** — Optical discs maintain your critical and valuable data for 100 years. Estimated lifetime based on acceleration tests that are being conducted by Panasonic.
- **Strong encryption** — Supports diverse QNAP applications and provides a comprehensive API for customization and third-party applications.
- **Data protection** — Follows best practices to meet 3-2-1 data protection rules.

BlueGlacier is designed to fulfill different resiliency patterns — SSD for high-I/O operations, HDD for general purpose applications, and optical discs for storing cold data and archiving long-term data. The built-in 10 GbE interfaces provide high-speed connectivity for heavy workloads.  
BlueGlacier has a built-in data enterprise NAS platform with abundant native applications and productivity tools to enhance the manageability of files and data.  
With QTS, the QNAP Hybrid Archival Manager (QHAM) and Data Archival File System (DAFS), the building blocks of BlueGlacier deliver an easy-to-use data storage and archiving workflow.



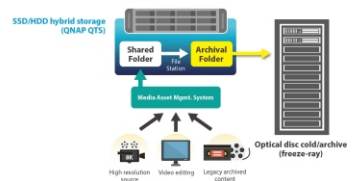
For the 3-2-1 rule, BlueGlacier Tiering Archive Storage can help you establish backups effortlessly provide optical disc storage, a physically distinct media from hard disk, and be set up offline easily. On top of providing easy management of data, BlueGlacier is the perfect choice for long-term data archiving.



- According to Data Backup Options, a United States Computer Emergency Response Team (US-CERT) publication, all computer users, from home users to professional information security officers, should back up their critical data to protect against loss or corruption. Saving just one backup file may not be enough to safeguard your information. To increase your chances of recovering lost or corrupted data, follow the 3-2-1 rule.
- **3 - Keep 3 copies of any important file: 1 primary and 2 backups.**
  - **2 - Keep the files on 2 different media types to protect against different types of hazards.**
  - **1 - Store 1 copy offsite (outside your home or business facility).**

### Application Example of Media & Entertainment Industry

As multimedia technology improves, mainstream display resolutions have rapidly evolved from 1080p to 4K, with 8K and 16K on the horizon. With the increase in image quality comes a major increase in storage requirements for both producing and archiving media files. BlueGlacier Tiering Archive Storage offers an SSD/HDD hybrid tier to quickly respond to data from media asset management systems, and once the data is selected to be pushed to the collaborative data storage, optical disc will be the best place for it. BlueGlacier's comprehensive API support also enables the possibility of integrating the media asset management system into BlueGlacier to improve user workflows.



# 承認書規格表

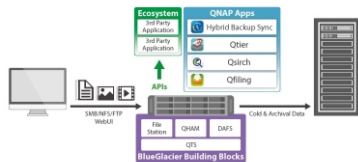
料號	51000-024450-RS	材質	封面-雪銅150P 內頁-雪銅150P
版本	EN-A版	印刷	正四反四
尺寸	21x29.7cm	裝訂	騎馬釘(左翻)
頁數	8頁	上光	封面-局部光 封面封底內頁-上水消光

## 原始圖檔:



QNAP caching technologies inside BlueGlacier effectively manage HDD & SSD arrays. Hybrid Backup Sync consolidates data backup, file sync, and disaster recovery into a single app. All of these deliver a highly-automated environment with excellent performance, greatly streamlining and consolidating workflow of every day tasks into a single application.

On top of these system essentials, BlueGlacier users can leverage QNAP applications to enhance work productivity. For example, Qich can you quickly find files and Qiling helps to automate the organization and archiving of files and data. There are many more applications on QNAP NAS that can extend system functionality and to provide additional features.



### Advantages of BlueGlacier Tiering Archive Storage

There is no steep learning curve or switching costs for adopting BlueGlacier Tiering Archive Storage. With QNAP's best-in-class NAS applications and user experience, BlueGlacier provides a user-friendly environment to manage data across every stage of its lifespan. It consolidates complex storage management operations into a simple web user interface.



QNAP Hybrid Archival Manager simplifies and streamlines management operations of an optical disc library. With just a few clicks you can finish system configurations, manage management, table settings, and log tracking.



Qich is a powerful full-text search engine that quickly finds desired files to increase your work efficiency.



QNAP SSD/HDD hybrid storage technology: Qiling™ technology empowers automatic tiering storage solutions that migrates frequently accessed "hot" data to high-performance storage tiers and infrequently accessed "cold" data to low-cost, high-capacity drives to optimize your storage performance and utilization.



BlueGlacier offers comprehensive API support listed below for partners and users. With these APIs, partners can integrate their applications into BlueGlacier as part of this strong enterprise storage ecosystem. It also provides great flexibility for customization.

- Freeze-ray system and magazine management API
- Data archival/retention job management API
- Data Archival File System (DAFS) management API
- FlashDrive read-write operations API
- NAS system management API

BlueGlacier's advanced Data Archival File System (DAFS) allows storage pools containing plural physical storage devices to be created. It cuts files into blocks and consequently distributes them to grouped physical devices. This eliminates the need to manage files into storage devices and also enhances storage utilization. When large batches of files need to be archived/backed up, DAFS saves you from time-consuming tasks.



QNAP Storage & Snapshot Manager provides a secure, flexible and comprehensive approach to managing data on BlueGlacier before being archived on optical drives. BlueGlacier also offers a number of great features such as storage pools, multiple RAID groups, thin-provisioned volumes, space reclamation, and online capacity expansion. These features can effectively protect your valuable data.

QNAP's File Station provides desktop-style file management in a web browser to simplify archiving operations and to increase productivity. Open a web browser, log in to File Station and you can immediately manage files stored on BlueGlacier.



QNAP offers a wide range of NEM solutions that fit every need and budget. With a selection of form factors (boxes, rackmount, wall), storage capacities (up to 100 exabytes), performance (low ECC, hybrid, off-RAID), and connectivity (up to 10GbE), potential users can easily find a model for their unique hot and cold data storages.

	HDDs (for near line)	Tapes	Optical Discs	QNAP BlueGlacier
Data Security	▲	▲	★	★
Non-volatility	▲	▲	★	★
Long Life	around 4 years	10-30 years	50-100 years	50-100 years
Durability	▲	▲	★	★
Compatibility	▲	▲	★	★
Total Cost of Ownership (TCO)	×	▲	★	★
Random Access Capability	★	▲	●	★
Transfer Rate	★	★	●	★

\* up to two generations back

Optical discs have great potential to further enhance their recording density (storage capacity) with technological advancements. Drawing on its know-how and expertise in optical disc technology developed over the last 20 years, Panasonic has continued to make headway in developing higher-density optical discs. Panasonic now offers the next-generation optical disc, the "Archival Disc" optimized for storing large volumes of data for an extended period of time, they are perfect requirements for tape and provide the best solution for data archiving.

#### • Data security

For data security, the recording media itself needs to have a non-volatile structure. The write-once characteristic of optical disc uses physical changes to record data and make overwriting impossible, so it is structurally very secure. Magnetic recording media such as HDDs and tapes can be repeatedly overwritten, so additional measures (such as software) are needed to ensure the data security of these systems.

#### • Non-volatility

Magnetic recording media, such as HDDs and tapes, have the risk of losing recorded data when subjected to magnetic fields. Optical discs use physical changes for recording and have non-volatile memory. Non-volatility is one of the most important characteristics for ultra-long-term storage.

#### • Long archival life & great reliability

Longevity of data storage can be affected by the structure and the quality of the materials of the storage media in addition to environmental factors. These cause the difference in the longevity of storage: less than 5 years for HDDs and 10-30 years for tapes.

HDDs employ a system that combines a mechanical drive and recording media, and the longevity of these drives is generally short. Tape systems utilize long rolls of ultra-thin film which is prone to breakage. Optical discs have a stable recorded condition utilizing physical changes and this media has the longest storage capabilities. Panasonic "Archival Disc" in optical disc for professional use has an estimated lifespan of 100 years.

#### • Compatibility

Unless changes are made in the fundamental principles of recording, optical discs can remain compatible with discs from different generations from the past. For example, in the Archival Disc roadmap, as backward compatibility is maintained for discs from different generations, no work and no cost for migration would be necessary. In the case of tapes, compatibility may be lost due to the change of specifications to increase memory capacity. Provided that next-generation products are introduced every 2 to 3 years and the compatibility is basically supported up to the previous two generations, migration would be necessary about once every 7 years to maintain readability of past records.



## 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 1 of 9

中華紙漿股份有限公司

CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGCHING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as):

送樣廠商(Sample Submitted By) : 中華紙漿股份有限公司 (CHUNG HWA PULP CORPORATION)

樣品名稱(Sample Description) : COATED PAPER (銅版紙類)

收件日期(Sample Receiving Date) : 2013/07/10

測試期間(Testing Period) : 2013/07/10 TO 2013/07/17

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

  
Troy Chang, Manager Tech  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory – Taipei

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.





## 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 2 of 9

中華紙漿股份有限公司

CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGCHING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.



### 測試結果(Test Results)

測試部位(PART NAME)No.1 : 白色紙張 (WHITE PAPER)

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	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.
汞 / Mercury (Hg)	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.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考 IEC 62321: 2008 方法, 以 UV-VIS 檢測. / With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.
六溴環十二烷及所有主要被辨別出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ -HBCDD, $\beta$ -HBCDD, $\gamma$ -HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	mg/kg	參考 IEC 62321: 2008 方法, 以氣相層析/質譜儀檢測. / With reference to IEC 62321: 2008 method. Analysis was performed by GC/MS.	5	n.d.
鄰苯二甲酸甲苄基丁酯 / BBP (Benzyl butyl phthalate) (CAS No.: 85-68-7)	%	參考 EN 14372, 以氣相層析/質譜儀檢測. / With reference to EN 14372. Analysis was performed by GC/MS.	0.003	n.d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 3 of 9

中華紙漿股份有限公司



CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGGING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.

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
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	%	參考EN 14372, 以氣相層析/質譜儀檢測之。 / With reference to EN 14372. Analysis was performed by GC/MS.	0.003	n.d.
鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di- (2-ethylhexyl) phthalate) (CAS No.: 117-81-7)	%	參考EN 14372, 以氣相層析/質譜儀檢測之。 / With reference to EN 14372. Analysis was performed by GC/MS.	0.003	n.d.
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析/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.
多溴聯苯醚總和 / Sum of PBDEs	mg/kg		-	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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 4 of 9

中華紙漿股份有限公司



CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGCHING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.

### 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)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 5 of 9

中華紙漿股份有限公司

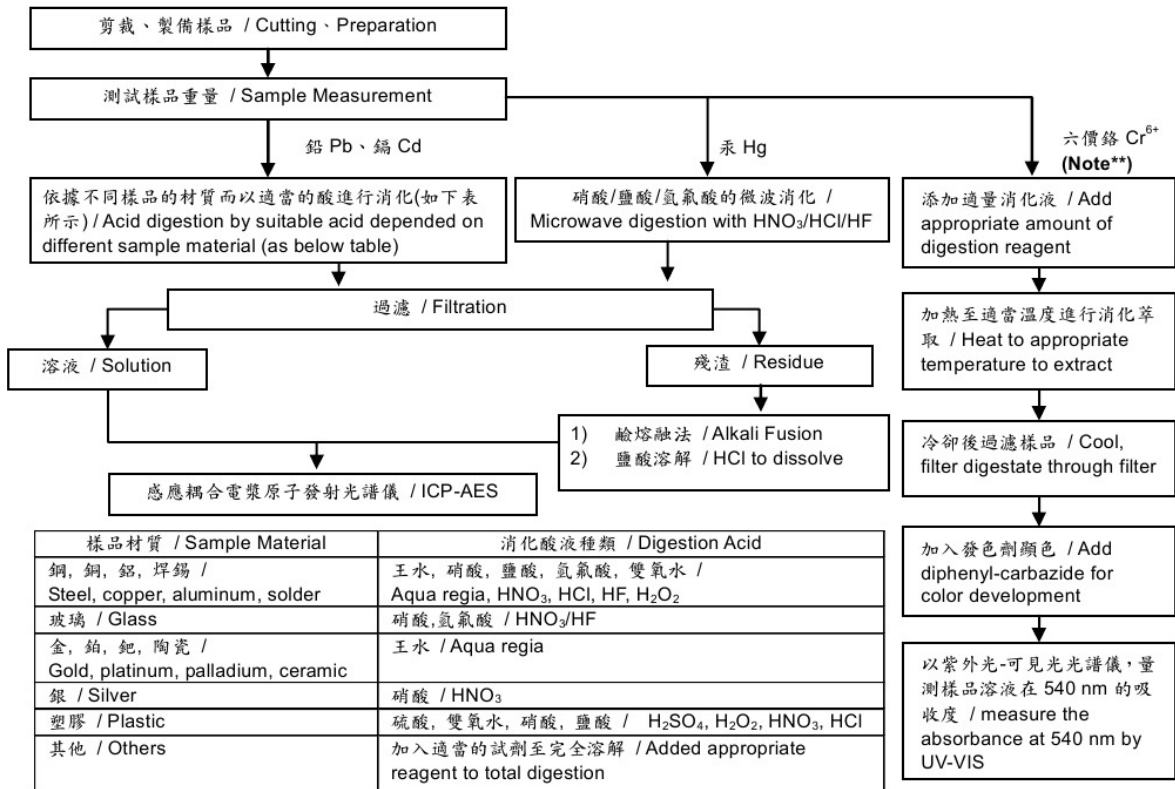
CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGGING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, 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：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



**Note\*\*:** (1) 針對非金屬材料加入鹼性消化液，加熱至 90~95℃ 萃取。 / For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.  
(2) 針對金屬材料加入純水，加熱至沸騰萃取。 / For metallic material, add pure water and heat to boiling.

# 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 6 of 9

中華紙漿股份有限公司



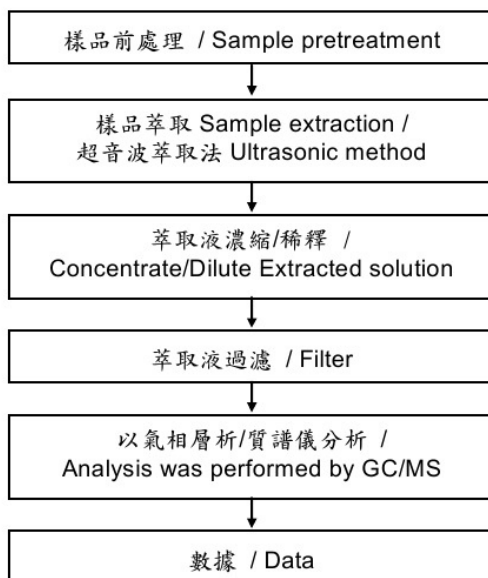
CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGCHING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.

### 六溴環十二烷分析流程圖 / HBCDD analytical flow chart

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



# 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 7 of 9

中華紙漿股份有限公司



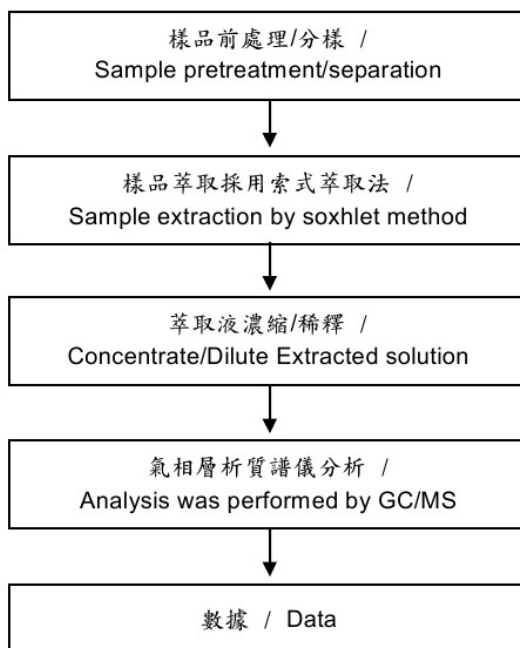
CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGCING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.

### 可塑劑分析流程圖 / Analytical flow chart of phthalate content

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 8 of 9

中華紙漿股份有限公司

CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGCHING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.



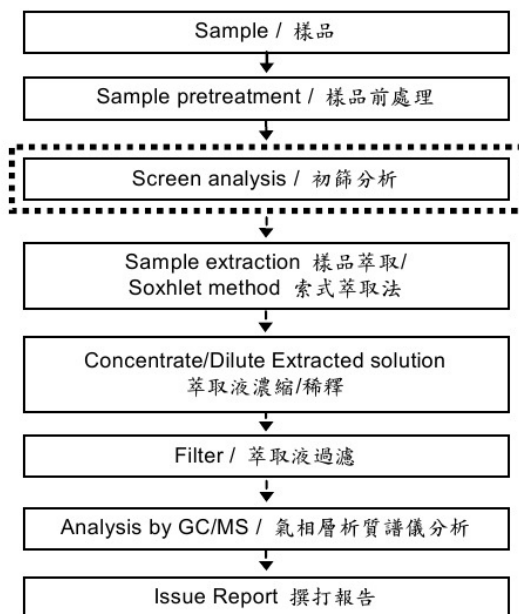
### 多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy 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 - - ->



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告

## Test Report

號碼(No.) : CE/2013/72060 日期(Date) : 2013/07/17 頁數(Page) : 9 of 9

中華紙漿股份有限公司



CHUNG HWA PULP CORPORATION

台北市中正區重慶南路二段51號12樓

12F, NO. 51, SEC. 2, CHONGCHING SOUTH RD., JHONGJHENG DISTRICT, TAIPEI CITY 100, TAIWAN, R. O. C.

\* 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/2013/72060



\*\* 報告結尾 (End of Report) \*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50685

日期(Date) : 2014/05/12

頁數(Page): 1 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as) :

送樣廠商(Sample Submitted By) : 柯達貿易股份有限公司 (KODAK TRADING CO., LTD.)

樣品名稱(Sample Description) : SUPER TEK GT YELLOW ML (SUPER TEK GT 黃ML)

原產國(Country of Origin) : 日本 (JAPAN)

收件日期(Sample Receiving Date) : 2014/05/06

測試期間(Testing Period) : 2014/05/06 TO 2014/05/12

測試需求(Test Requested) : 依據客戶要求, 參考RoHS 2011/65/EU Annex II 指令進行鎘, 鉛, 汞, 六價鉻, 多溴聯苯, 多溴聯苯醚測試. (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted sample.)

測試方法(Test Method) : 請見下一頁 (Please refer to next pages).

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

  
Troy Chang, Manager - Tech  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.





## 測試報告

## Test Report

號碼(No.) : CE/2014/50685

日期(Date) : 2014/05/12

頁數(Page): 2 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T &amp; K TOKA / T &amp; K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

### 測試結果(Test Results)

測試部位(PART NAME)No.1 : 黃色膏狀 (YELLOW PASTE)

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 62321-5: 2013方法, 以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg		2	n.d.
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4: 2013方法, 以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-4: 2013 and performed by ICP-AES.	2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考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	參考IEC 62321: 2008方法, 以氣相層析/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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.





## 測試報告

## Test Report

號碼(No.) : CE/2014/50685

日期(Date) : 2014/05/12

頁數(Page): 3 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

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
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析/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)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50685

日期(Date) : 2014/05/12

頁數(Page): 4 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

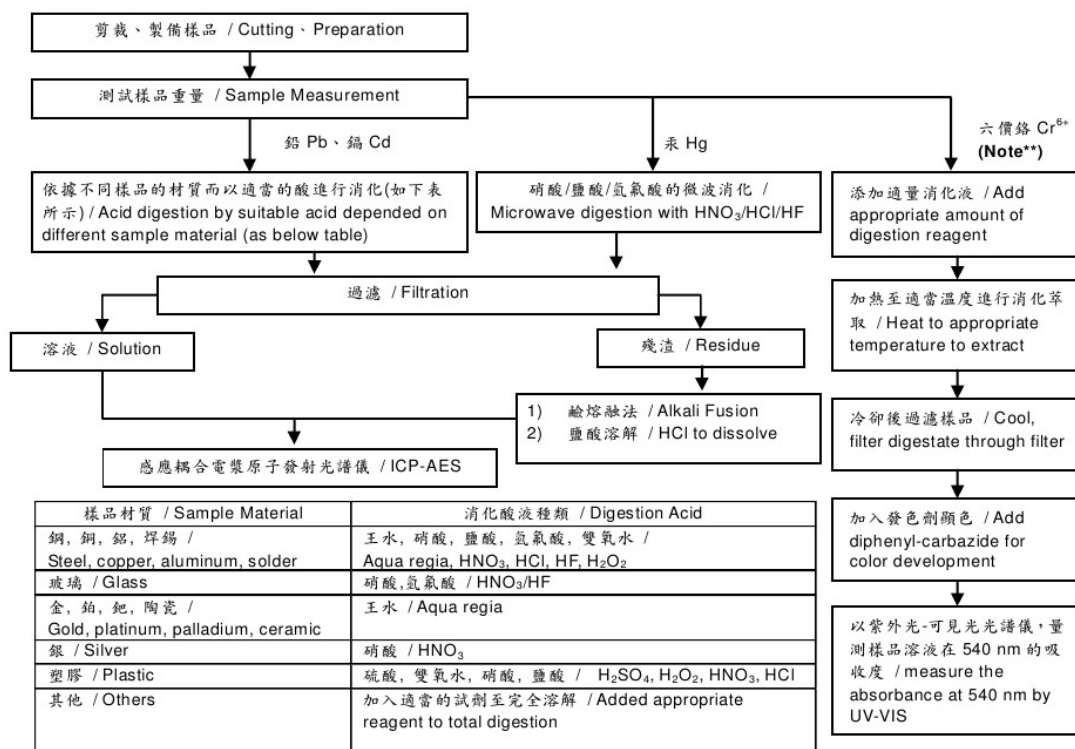
台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



- 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：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



**Note\*\*:** (1) 針對非金屬材料加入鹼性消化液, 加熱至 90-95°C 萃取。 / For non-metallic material, add alkaline digestion reagent and heat to 90-95°C.

(2) 針對金屬材料加入純水, 加熱至沸騰萃取。 / For metallic material, add pure water and heat to boiling.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50685

日期(Date) : 2014/05/12

頁數(Page): 5 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



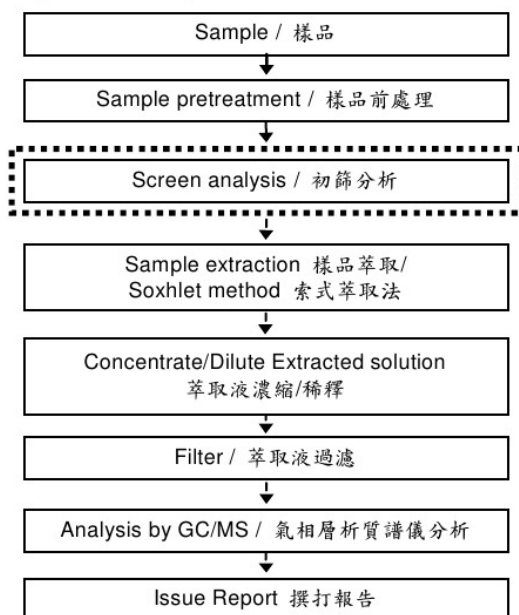
### 多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy 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 - - ->



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50685

日期(Date) : 2014/05/12

頁數(Page): 6 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



\* 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/2014/50685



\*\* 報告結尾 (End of Report) \*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2014/50686

日期(Date) : 2014/05/12

頁數(Page): 1 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as):

送樣廠商(Sample Submitted By) : 柯達貿易股份有限公司 (KODAK TRADING CO., LTD.)

樣品名稱(Sample Description) : SUPER TEK GT MAGENTA ML (SUPER TEK GT 紅ML)

原產國(Country of Origin) : 日本 (JAPAN)

收件日期(Sample Receiving Date) : 2014/05/06

測試期間(Testing Period) : 2014/05/06 TO 2014/05/12

測試需求(Test Requested) : 依據客戶要求, 參考RoHS 2011/65/EU Annex II 指令進行鎘, 鉛, 汞, 六價鉻, 多溴聯苯, 多溴聯苯醚測試. (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted sample.)

測試方法(Test Method) : 請見下一頁 (Please refer to next pages).

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

  
Troy Chang, Manager - Tech  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.





## 測試報告

## Test Report

號碼(No.) : CE/2014/50686

日期(Date) : 2014/05/12

頁數(Page): 2 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T &amp; K TOKA / T &amp; K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

### 測試結果(Test Results)

測試部位(PART NAME)No.1 : 紅色膏狀 (RED PASTE)

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 62321-5: 2013 方法, 以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg		2	n.d.
汞 / Mercury (Hg)	mg/kg	參考 IEC 62321-4: 2013 方法, 以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-4: 2013 and performed by ICP-AES.	2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考 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	參考 IEC 62321: 2008 方法, 以氣相層析/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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2014/50686

日期(Date) : 2014/05/12

頁數(Page): 3 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

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
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析/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)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50686

日期(Date) : 2014/05/12

頁數(Page): 4 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

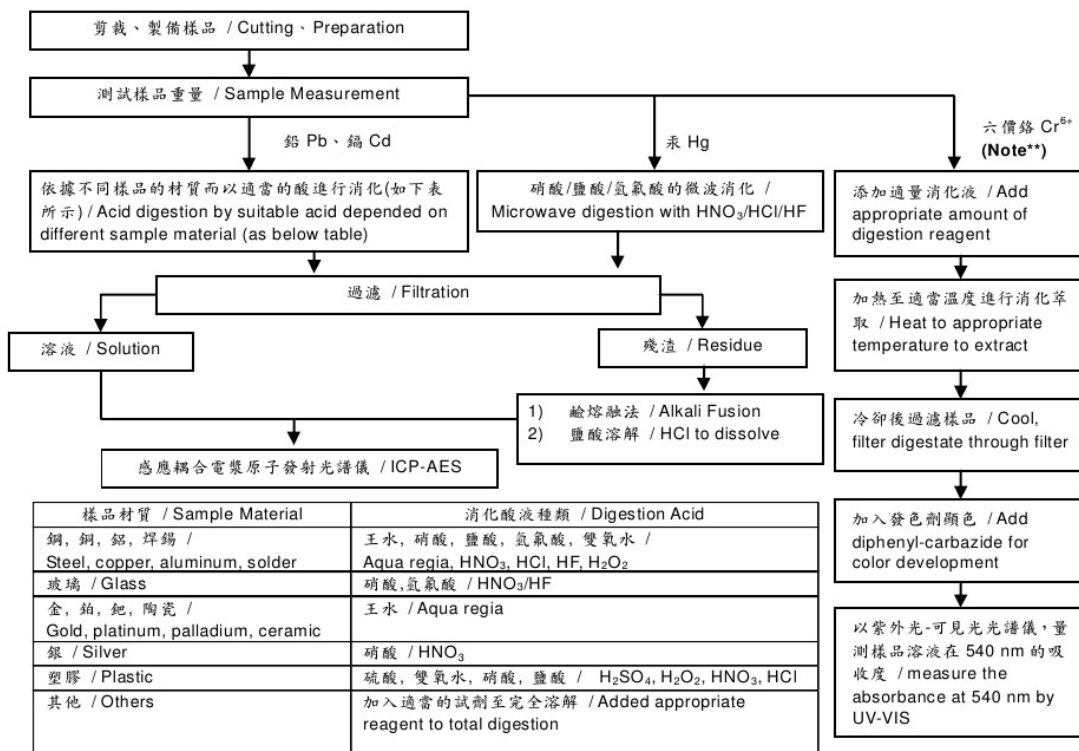
台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



- 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：楊登偉 / Name of the person who made measurement: Climbgreat Yang
- 3) 測試負責人：張修興 / Name of the person in charge of measurement: Troy Chang



**Note\*\*:** (1) 針對非金屬材料加入鹼性消化液, 加熱至 90~95°C 萃取. / For non-metallic material, add alkaline digestion reagent and heat to 90~95°C.  
 (2) 針對金屬材料加入純水, 加熱至沸騰萃取. / For metallic material, add pure water and heat to boiling.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50686

日期(Date) : 2014/05/12

頁數(Page): 5 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



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

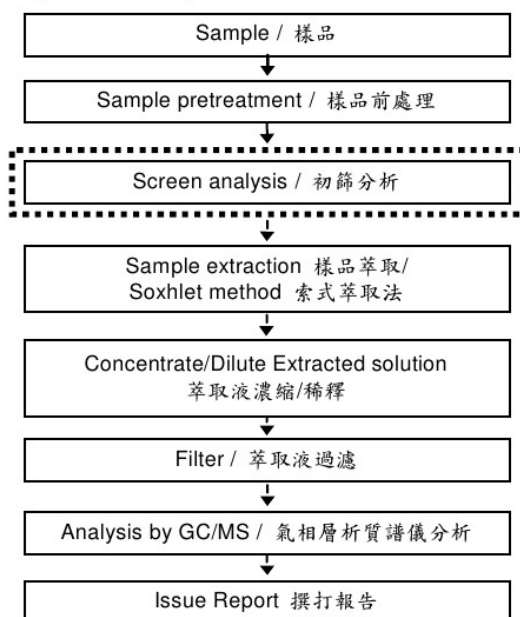
■ 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong

■ 測試負責人：張啓興 / Name of the person in charge of measurement: Troy 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 - - ->



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2014/50686

日期(Date) : 2014/05/12

頁數(Page): 6 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



\* 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/2014/50686



\*\* 報告結尾 (End of Report) \*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2014/50687

日期(Date) : 2014/05/12

頁數(Page): 1 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as) :

送樣廠商(Sample Submitted By) : 柯達貿易股份有限公司 (KODAK TRADING CO., LTD.)

樣品名稱(Sample Description) : SUPER TEK GT CYAN ML (SUPER TEK GT 藍ML)

原產國(Country of Origin) : 日本 (JAPAN)

收件日期(Sample Receiving Date) : 2014/05/06

測試期間(Testing Period) : 2014/05/06 TO 2014/05/12

測試需求(Test Requested) : 依據客戶要求, 參考RoHS 2011/65/EU Annex II 指令進行鎘, 鉛, 汞, 六價鉻, 多溴聯苯, 多溴聯苯醚測試. (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted sample.)

測試方法(Test Method) : 請見下一頁 (Please refer to next pages).

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

  
Troy Chang, Manager - Tech  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2014/50687

日期(Date) : 2014/05/12

頁數(Page): 2 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T &amp; K TOKA / T &amp; K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



### 測試結果(Test Results)

測試部位(PART NAME)No.1 : 藍色膏狀 (BLUE PASTE)

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 62321-5: 2013 方法, 以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 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	參考 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	參考 IEC 62321: 2008 方法, 以氣相層析/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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2014/50687

日期(Date) : 2014/05/12

頁數(Page): 3 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

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
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析/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)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



# 測試報告

## Test Report

號碼(No.) : CE/2014/50687

日期(Date) : 2014/05/12

頁數(Page): 4 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

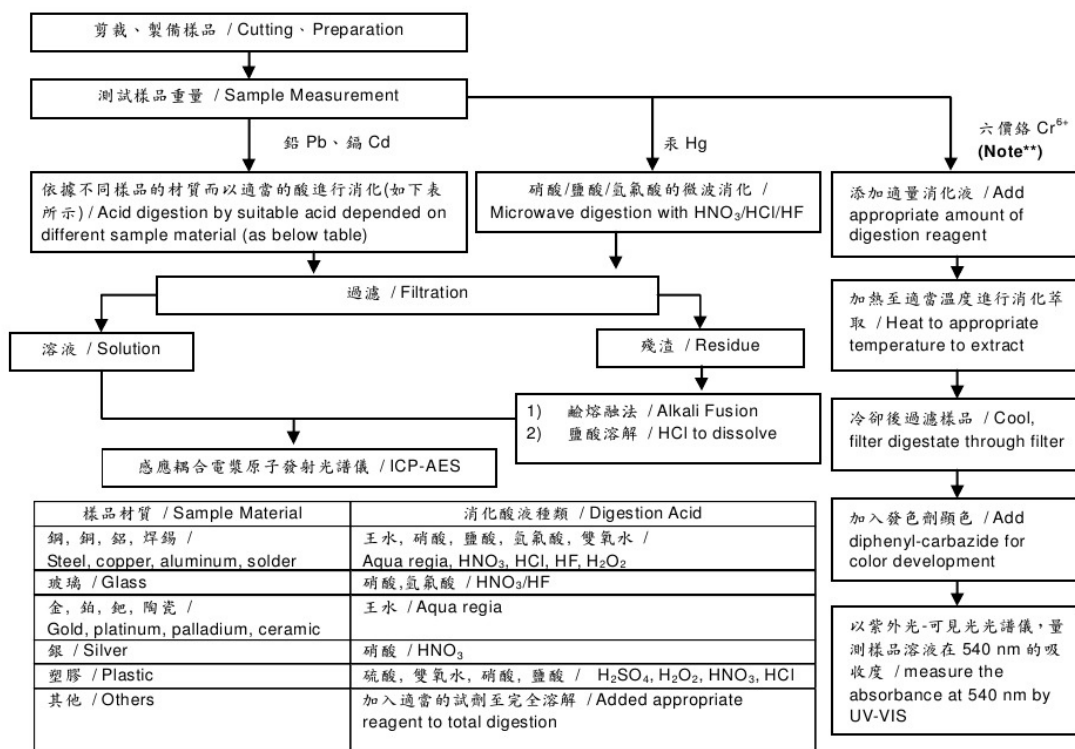
台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



- 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：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



**Note\*\*:** (1) 針對非金屬材料加入鹼性消化液, 加熱至 90~95℃ 萃取. / For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.

(2) 針對金屬材料加入純水, 加熱至沸騰萃取. / For metallic material, add pure water and heat to boiling.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



# 測試報告

## Test Report

號碼(No.) : CE/2014/50687

日期(Date) : 2014/05/12

頁數(Page): 5 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



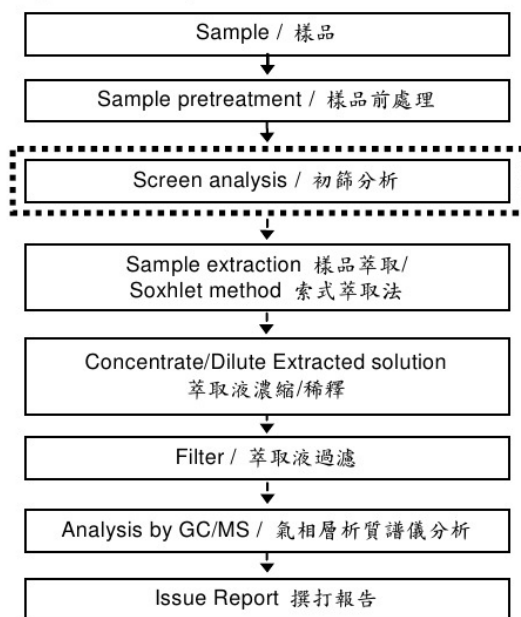
### 多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy 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 - - ->



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50687

日期(Date) : 2014/05/12

頁數(Page): 6 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

\* 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/2014/50687



\*\* 報告結尾 (End of Report) \*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50688

日期(Date) : 2014/05/12

頁數(Page): 1 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as) :

送樣廠商(Sample Submitted By) : 柯達貿易股份有限公司 (KODAK TRADING CO., LTD.)

樣品名稱(Sample Description) : SUPER TEK GT BLACK ML (SUPER TEK GT 黑ML)

原產國(Country of Origin) : 日本 (JAPAN)

收件日期(Sample Receiving Date) : 2014/05/06

測試期間(Testing Period) : 2014/05/06 TO 2014/05/12

測試需求(Test Requested) : 依據客戶要求, 參考RoHS 2011/65/EU Annex II 指令進行鎘, 鉛, 汞, 六價鉻, 多溴聯苯, 多溴聯苯醚測試. (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted sample.)

測試方法(Test Method) : 請見下一頁 (Please refer to next pages).

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

  
Troy Chang, Manager - Tech  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



## 測試報告

## Test Report

號碼(No.) : CE/2014/50688

日期(Date) : 2014/05/12

頁數(Page): 2 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T &amp; K TOKA / T &amp; K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

### 測試結果(Test Results)

測試部位(PART NAME)No.1 : 黑色膏狀 (BLACK PASTE)

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 62321-5: 2013方法, 以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg		2	n.d.
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4: 2013方法, 以感應耦合 電漿原子發射光譜儀檢測. / With reference to IEC 62321-4: 2013 and performed by ICP-AES.	2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考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	參考IEC 62321: 2008方法, 以氣相層析/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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.





## 測試報告

## Test Report

號碼(No.) : CE/2014/50688

日期(Date) : 2014/05/12

頁數(Page): 3 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

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
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析/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)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.): CE/2014/50688

日期(Date): 2014/05/12

頁數(Page): 4 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

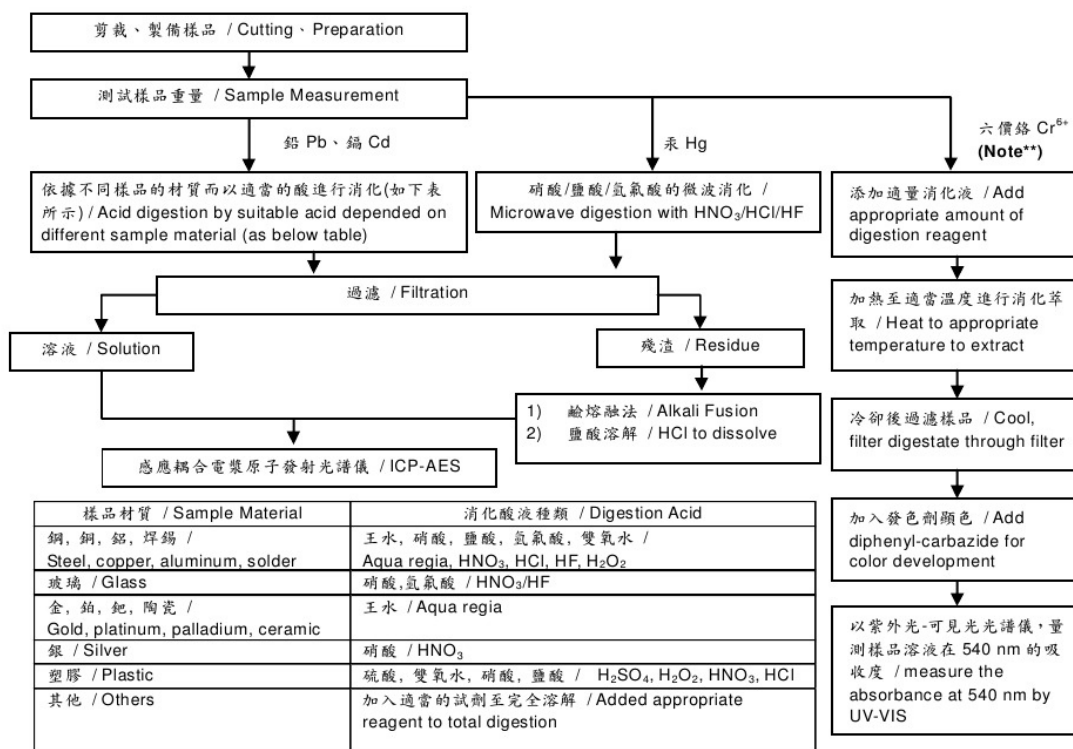
(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

- 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：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



**Note\*\*:** (1) 針對非金屬材料加入鹼性消化液，加熱至 90~95℃ 萃取。 / For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.

(2) 針對金屬材料加入純水，加熱至沸騰萃取。 / For metallic material, add pure water and heat to boiling.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告

## Test Report

號碼(No.) : CE/2014/50688

日期(Date) : 2014/05/12

頁數(Page): 5 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.

(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)



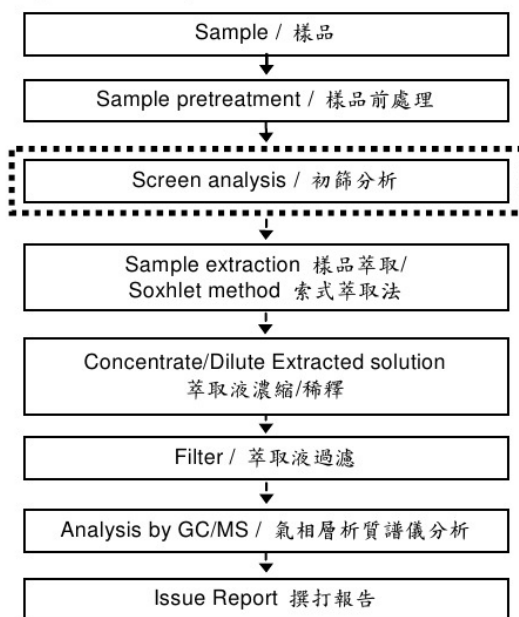
### 多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy 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 - - ->



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告

## Test Report

號碼(No.) : CE/2014/50688

日期(Date) : 2014/05/12

頁數(Page): 6 of 6

柯達貿易股份有限公司 / KODAK TRADING CO., LTD.



(株式會社T & K TOKA / T & K TOKA CO., LTD.)

(東華油墨國際(香港)有限公司 / TOKA INK INTERNATIONAL (HONG KONG) LTD.)

台北市大同區太原路24號2樓 / 2F, NO. 24, TAI YUAN ROAD, DATONG DIST, TAIPEI CITY, TAIWAN

(〒173-0001 東京都板橋區本町34-8 / 34-8, HON-CHO ITABASHI-KU, TOKYO 173-0001, JAPAN)

(香港九龍尖沙嘴廣東道30號新港中心第一座510室 / ROOM 510, TOWER 1, SILVERCORD NO. 30, CANTON RD., T.S.T. KOWLOON, HONG KONG)

\* 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/2014/50688



\*\* 報告結尾 (End of Report) \*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.