

Approval Sheet

Product Type	WLAN Antenna
Model Number	Crete DA05
Revision	X00
Part No. / Yageo / WLAN Antenna	CAN4313573012501B

Yageo (Taiwan) Ltd.

16, West 3rd Street, N.E.P.Z Kaohsiung, 811 Taiwan, R.O.C

Yageo Electronics (China) Co, Ltd

No. 10, Zhu Yuan Road, Suzhou New District, Suzhou, PRC

Multi Band Antenna with Cable & Connector.	CAN4313573012501B	R00	Sept. 20, 06
		R01	Oct. 03, 06
		R02	Oct. 20, 06
BY /	Teresa Chang	DATE /	Sept. 20, 2006

Table of Contents

- 1. Specifications**
 - 1.1 Specifications**
 - 1.2 Antenna Dimension / Cable Length / Cable Diameter**
 - 1.3 Packing Spec.**
 - 1.4 Antenna Picture**

- 2. Test Methodology**
 - 2.1 Test Equipment**
 - 2.2 Test Setup**
 - 2.2.1 Frequency Range**
 - 2.2.2 Antenna Configuration**
 - 2.2.3 VSWR**
 - 2.2.4 Radiation Pattern and Gain**

- 3. Performance Data**
 - 3.1 VSWR in the Fixture**
 - 3.2 Radiation Pattern and Gain**

- 4. Antenna Drawing**

- 5. Reliability Data for Antenna Patch**

- 6. Ordering Information: Yageo Ordering P/N Code**

- 7. Revision Control**

1. Specifications

1.1 Specifications for Antennas

Frequency Range (GHz)	2.40 ~ 2.50 for 802.11b/g 5.15 ~ 5.875 for 802.11a
VSWR	2.50 for 2.4GHz band 2.50 for 5.0GHz band
Peak Gain (dBi)	1.75 dBi for 2.4GHz band 1.75 dBi for 5.0GHz band
MiniPCI Connector	Hirose U.FL (or Compatible)
Impedance	50Ω
Operating Temperature	-40~90°C
Maximum Power	1W
Polarization	Linear
Radiation Pattern	Omni-directional

1.2 Antenna Dimension / Cable Length / Cable Diameter

Product	Crete / DA05 Antenna
WLAN Antenna Cable	Length=85 mm, Color=Gray, OD=1.13mm

1.3 Packing Spec.

Product	For Example
Inner Tray	60
Carton Box	265*100



1.4 Antenna Picture



2. Test Methodology

2.1 Test Equipment

The equipment for the antenna measurement we used is as follows.

- A. Agilent 8753ET / 8719D Network Analyzer to measure the VSWR and input impedance.
- B. Three-dimensional anechoic chamber to measure the gain
(Standard dipole and horn were used to calibrate the chamber)
- C. Digital caliper to measure the dimensions.
- D. Climatic chamber for mechanical tests.

2.2 Test Setup

2.2.1 Frequency Range

2.40 ~ 2.50GHz, 5.15 ~ 5.875GHz

2.2.2 Antenna Configuration

The antenna basically has two parts; the stamping and the cable assembly with the connector on one side. The detailed drawing is attached.

2.2.3 VSWR

The VSWR is measured with Agilent 8753ET / 8719D network analyzer. All the measurements are performed with the customer provided fixture. Figure 1 shows the schematic diagram for measuring VSWR.

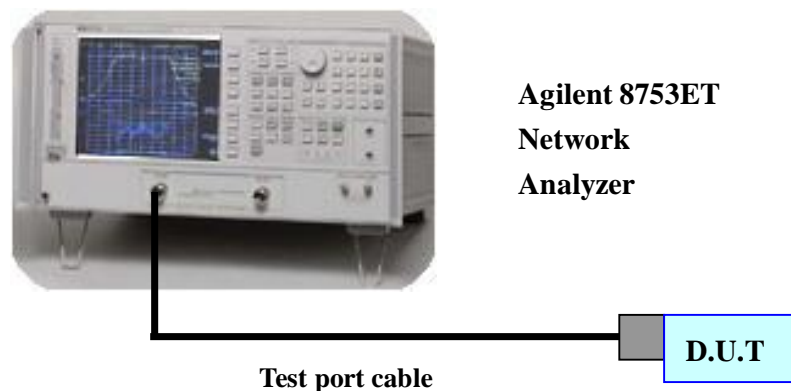


Figure 1. The schematic diagram for measuring VSWR

2.2.4 Radiation Pattern and Gain

The radiation pattern must have the omni-directional characteristic in both positions. The radiation pattern measurements are performed in the three-dimensional anechoic chamber. The chamber provides less than -30dB reflectivity from 800MHz through 8GHz. The chamber is calibrated using both standard dipole and horn antenna. The gain here is expressed as dBi that standardizes the isotropic antenna. The gain measurements are also performed in the same chamber described previously. Figure 2 shows the schematic diagram for measuring radiation pattern and gain.

2D Anechoic Chamber

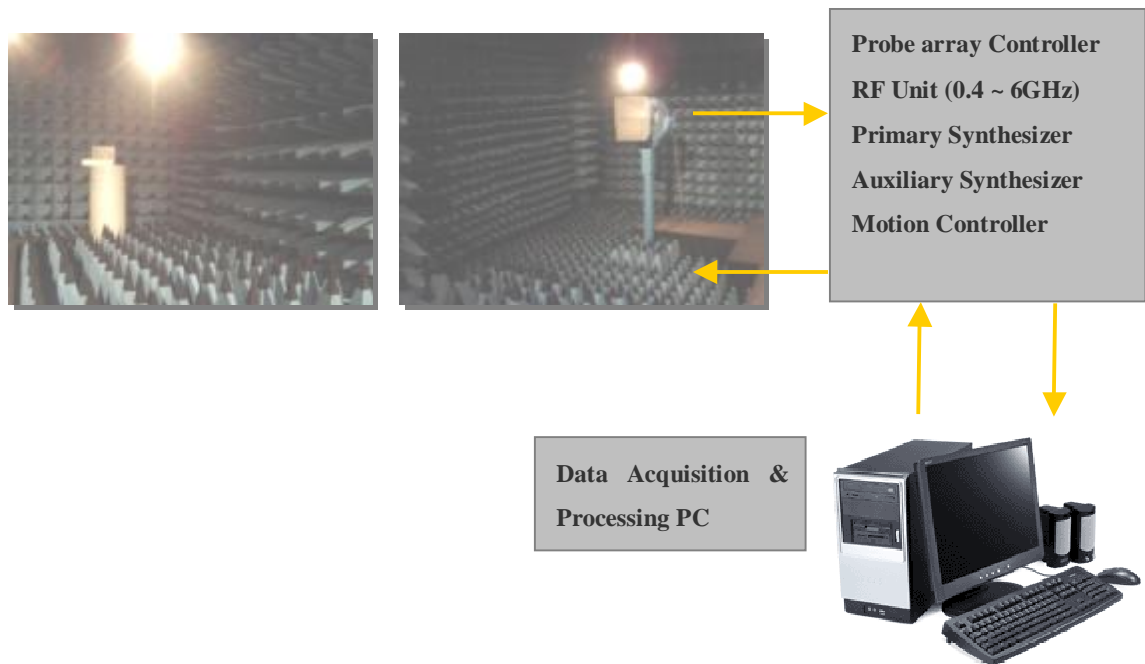
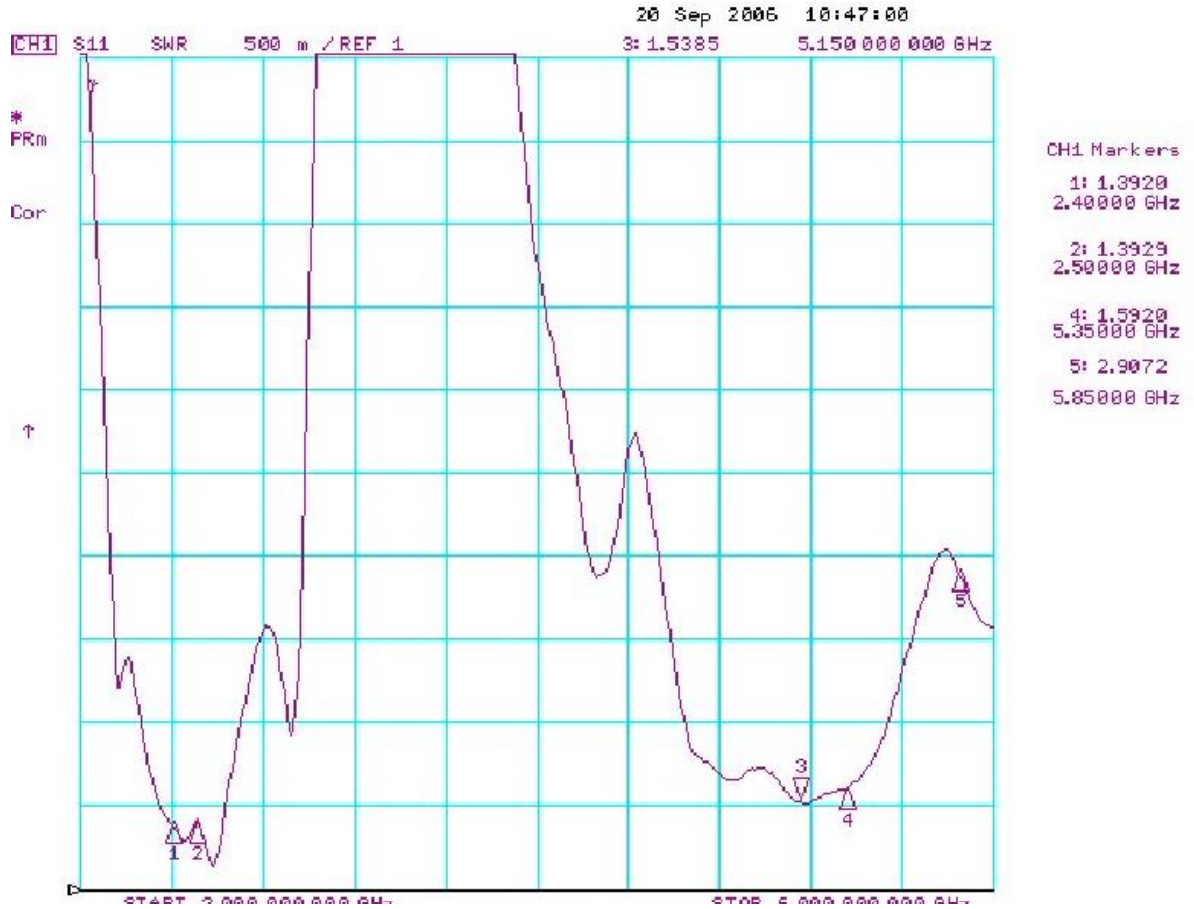


Figure 2. The schematic diagram for measuring radiation pattern and gain

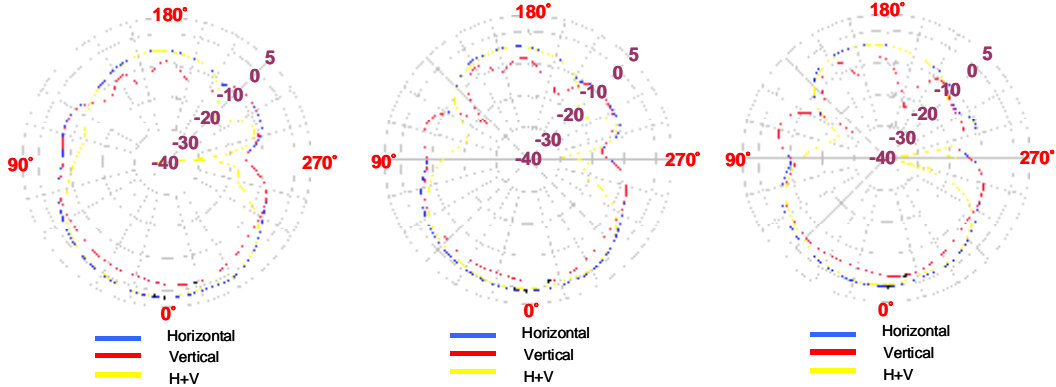
3. Performance Data

3. VSWR Measurement

VSWR of WLAN (Gray)



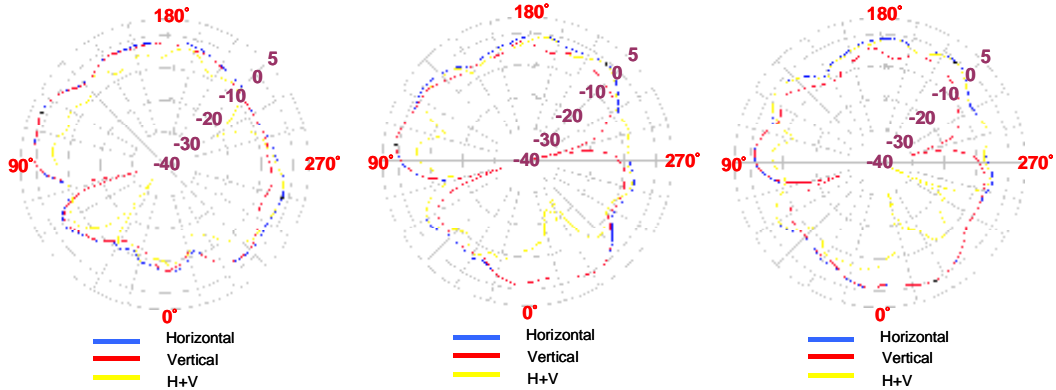
3.2 Radiation Pattern and Gain of WLAN (Gray)



Center Frequency	2400 MHz
Horizontal Peak Gain (dBi)	-1.29
Vertical Peak Gain (dBi)	1.75
Hori + Vert Avg. Gain (dBi)	-2.99

Center Frequency	2450 MHz
Horizontal Peak Gain (dBi)	-1.55
Vertical Peak Gain (dBi)	0.34
Hori + Vert Avg. Gain (dBi)	-3.79

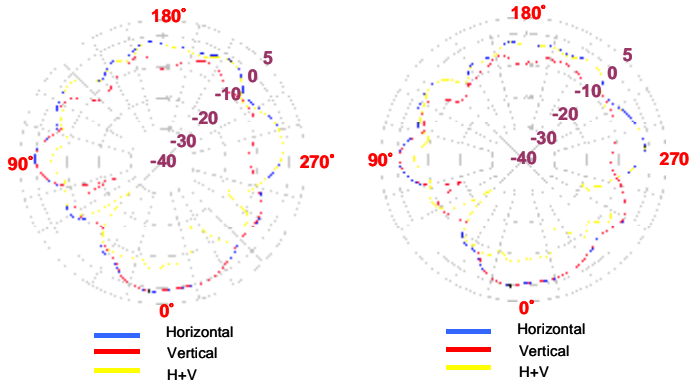
Center Frequency	2500MHz
Horizontal Peak Gain (dBi)	-2.73
Vertical Peak Gain (dBi)	-0.16
Hori + Vert Avg. Gain (dBi)	-4.40



Center Frequency	5150 MHz
Horizontal Peak Gain (dBi)	1.75
Vertical Peak Gain (dBi)	-2.13
Hori + Vert Avg. Gain (dBi)	-3.41

Center Frequency	5350 MHz
Horizontal Peak Gain (dBi)	0.98
Vertical Peak Gain (dBi)	-0.96
Hori + Vert Avg. Gain (dBi)	-3.03

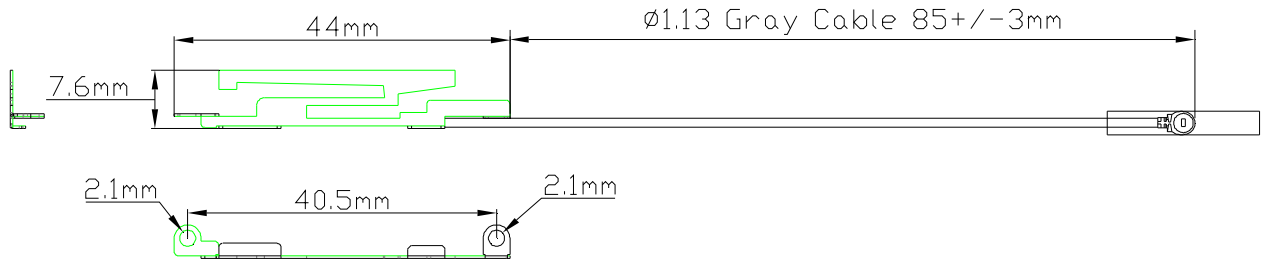
Center Frequency	5470 MHz
Horizontal Peak Gain (dBi)	0.49
Vertical Peak Gain (dBi)	-0.86
Hori + Vert Avg. Gain (dBi)	-3.23



Center Frequency	5785 MHz
Horizontal Peak Gain (dBi)	1.13
Vertical Peak Gain (dBi)	-1.36
Hori + Vert Avg. Gain (dBi)	-2.93

Center Frequency	5850 MHz
Horizontal Peak Gain (dBi)	0.17
Vertical Peak Gain (dBi)	-1.49
Hori + Vert Avg. Gain (dBi)	-3.68

4. Antenna Drawing



5. Reliability Data For Antenna Patch (Reference To IEC)

IEC 384-10/ CECC 32 100 CLAUSE	IEC 60068-2 TEST METHOD	TEST	PROCEDURE	REQUIREMENTS
4.12	4(Na)	Rapid change of temperature	-40 °C (30 minutes) to +90 °C (30 minutes); 5 cycles	No visible damage Central Freq. Change ± 6%
4.14	3(Ca)	Damp heat	500 ± 12 hours at 40 °C; 90 to 95 % RH	No visible damage 2 hours recovery Central Freq. Change ± 6%
4.15		Endurance	500 ± 12 hours at 90 °C;	No visible damage 2 hours recovery Central Freq. Change ± 6%

6. Ordering Information: Yageo Ordering P/N Code

The antennas may be ordered by using the Yageo P/N ordering code. These code numbers can be determined by the following rules:

CAN4313 5 43 01 250 1B
F C MS T A P

F. Family Code

CAN43 = Antenna

C. Packing Type Code

13 = Bulk (1000 pcs)

M. Materials Code

5 = High Frequency Material

S. Size/Series Code

43 = KH3 Antenna

T. Tolerance/Cable

01 = Full MIMO

A. Working Frequency

252 = 2.45/5 GHz Dual Band

P. Packing

1B = 1000 pcs packing

7. Revision Control

Document Revision	Date	Content	Remark
R00	Sept. 20, 2006	New Issued	N/A
R01	Oct. 03, 2006	Revise information of cable length.	N/A
R02	Oct.20, 2006	Adding SGS Test Report	N/A

9. SGS Documents

SGS Report of Metal Body



TEST REPORT

REPORT NO KA/2006/60075
 DATE: 2006/06/13
 PAGE: 1 OF 2



THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED ON BEHALF OF THE CLIENT AND IDENTIFIED AS:

CLIENT : Yageo Corporation.
 : 16, West 3rd, N.E.P.Z. P.O. Box 35-106 Kaohsiung, Taiwan, R.O.C.
 PRODUCT DESCRIPTION : METAL (PHOSPHOR BRONZE).
 STYLE/ITEM NO. : MASS PRODUCTION TYPE.
 SAMPLE : AS ATTACHED PHOTO.
 TESTING DATE : 2006/6/12 TO 2006/6/13.
 SAMPLE RECEIVED : 2006/06/12.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

TEST ITEM(S)	UNIT	METHOD	MDL	RESULT
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion	2	550

NOTE: (1) n.d. = not detected
 (2) ppm = mg/kg
 (3) MDL = Method Detection Limit
 (4) Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



Ray Chang
 Richard Kuo / Supervisor
 Signed for and on behalf of
 SGS Taiwan Limited

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告係遵照本公司訂定之通用檢驗條款所製作發給。請注意此報告之印製內容。與本公司

TW 3018986

SGS Report of Metal Body (Continue)



TEST REPORT

REPORT NO. KA/2006/60875
DATE: 2006/06/13
PAGE: 2 OF 2



This Test Report is issued by the Company subject to its General Conditions of Service printed over leaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告係根據本公司訂定之通用檢驗條款所製成。請注意此報告所附之限制、本公司之責任、賠償及管轄權等事項。未經本公司書面許可，不得重印或轉載。

TW 3018985

SGS Report of Metal Body (Continue)



TEST REPORT

REPORT NO. KA/2006/60875B-01
DATE: 2006/06/19
PAGE: 1 OF 3



THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED ON BEHALF OF THE CLIENT AND IDENTIFIED AS :

CLIENT : Yageo Corporation.
: 16, West 3rd, N.E.P.Z. P.O. Box 35-106 Kaohsiung, Taiwan, R.O.C.
PRODUCT DESCRIPTION : METAL (PHOSPHOR BRONZE).
STYLE/ITEM NO. : MASS PRODUCTION TYPE.
SAMPLE : AS ATTACHED PHOTO.
TESTING DATE : 2006/6/12 TO 2006/6/19.
SAMPLE RECEIVED : 2006/06/12.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

TEST ITEM(S)	UNIT	METHOD	MDL	RESULT
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122 :2001 or other acid digestion.	2	n.d.
Chromium VI (Cr+6)	ppm	UV-VIS(US EPA 7196A) after reference to US EPA 3060A.	2	n.d.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	n.d.
PBBs(Polybrominated biphenyls)	---	---	---	---
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/760/EEC)	0.0005	n.d.
Dibromobiphenyl	%		0.0005	n.d.
Tribromobiphenyl	%		0.0005	n.d.
Tetrabromobiphenyl	%		0.0005	n.d.
Pentabromobiphenyl	%		0.0005	n.d.
Hexabromobiphenyl	%		0.0005	n.d.
Heptabromobiphenyl	%		0.0005	n.d.
Octabromobiphenyl	%		0.0005	n.d.
Nonabromobiphenyl	%		0.0005	n.d.
Decabromobiphenyl	%		0.0005	n.d.



Kueilan Chen
Kueilan Chen / Asst. Supervisor
Sign for and on behalf of
SGS Taiwan Limited

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) named unless otherwise stated. This Test Report cannot be reproduced, stored in full, without prior written permission of the Company. 此報告僅屬本公司訂立之檢驗契約條款之附件。請注意此報告的保固範圍、與本公司之責任、免責、權利保留與條款等。此報告結果僅對有說明檢驗之樣品負責。本報告不得在本公司外任意刊布、复制或複製。

TW 2621589

SGS Taiwan Ltd. No. 208 Chung Hwa 2nd Road Sec 4 Min District Kaohsiung, Taiwan. / 高雄市中區中華二路208號.
台灣檢驗科技股份有限公司 1 (886-7) 323-0820 4 (886-7) 315-7484 www.tw.sgs.com

Member of SGS Group

2001

SGS Report of Metal Body (Continue)



TEST REPORT

REPORT NO. KA/2008/60875B-01
DATE: 2008/06/19
PAGE: 2 OF 3

TEST ITEM(S)	UNIT	METHOD	MDL	RESULT
PBDEs (Polybrominated biphenyl ethers)	---	---	---	---
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3560C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 75/785/EEC)	0.0005	n.d.
Dibromobiphenyl ether	%		0.0005	n.d.
Tribromobiphenyl ether	%		0.0005	n.d.
Tetrabromobiphenyl ether	%		0.0005	n.d.
Pentabromobiphenyl ether	%		0.0005	n.d.
Hexabromobiphenyl ether	%		0.0005	n.d.
Heptabromobiphenyl ether	%		0.0005	n.d.
Octabromobiphenyl ether	%		0.0005	n.d.
Nonabromobiphenyl ether	%		0.0005	n.d.
Decabromobiphenyl ether	%		0.0005	n.d.

NOTE: (1) n.d. = not detected
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.



This Test Report is issued by the Competent authority in its General Conditions of Service printed hereon. Attention is drawn to the limitations of scope, responsibilities and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是遵照本公司訂定之通用檢驗條款所製成。請注意此檢驗報告的範圍，與本公司之義務、責任、檢驗標準與檢驗之條件。本報告未經本公司書面許可，不可擅自複製。

TW 2621588

2001

SGS Taiwan Ltd. No. 268, Chung Hwa 2nd Road San Min District Kaohsiung, Taiwan. / 高雄市中區中華二路268號
台灣檢驗科技股份有限公司 | 電話: (886-7) 323-0520 | 傳真: (886-7) 315-7494 | www.taiwan.sgs.com

Member of SGS Group

SGS Report of Metal Body (Continue)



TEST REPORT

REPORT NO. KA2006/60875B-01
DATE: 2006/06/19
PAGE 3 OF 3



This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this report refer only to the sampling tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告係根據本公司訂定之委託檢驗契約條款所發出，請注意此報告列明之限制、責任本公司之義務、全數、檢驗項目與檢驗費之、此報告結果僅供說明檢驗結果之參考，不得作為法律訴訟之依據。本報告未經本公司蓋章許可，不可擅自複製。

TW 2621587

SGS Taiwan Ltd. No. 208, Chung Hwa 2nd Road San Min District Keelung, Taiwan / 高雄市三民區中華二路208號
台灣檢驗科技股份有限公司 電話(886-7) 323-8620 傳真(886-7) 315-2484 www.tw.sgs.com

Model of 315 2rev

2001

SGS Report of Solder



TEST REPORT

REPORT NO. KA/2005/91321/A-1
DATE: 2005/9/29
PAGE: 1 OF 3

THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED AND IDENTIFIED BY THE CLIENT AS :

CLIENT : YAGEO CORPORATION NANTZE BRANCH.
: 16, WEST 3RD, N.E.P.Z. P.O. BOX 35-108 KAOHSIUNG, TAIWAN, R.O.C.
PRODUCT DESCRIPTION : SOLDER.
SAMPLE : AS ATTACHED PHOTO.
TESTING DATE : 2005/9/22 TO 2005/9/29 .
SAMPLE RECEIVED : 2005/09/22.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	n.d.
Chromium VI (Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A.	2	n.d.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	n.d.
Nickel (Ni)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	501
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	282
PBBs(Polybrominated biphenyls)	---	---	---	---
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 78/769/EEC)	0.0005	n.d.
Dibromobiphenyl	%		0.0005	n.d.
Tribromobiphenyl	%		0.0005	n.d.
Tetrabromobiphenyl	%		0.0005	n.d.
Pentabromobiphenyl	%		0.0005	n.d.
Hexabromobiphenyl	%		0.0005	n.d.
Heptabromobiphenyl	%		0.0005	n.d.
Octabromobiphenyl	%		0.0005	n.d.
Nonabromobiphenyl	%		0.0005	n.d.
Decabromobiphenyl	%		0.0005	n.d.



Kueilan Chen

Kueilan Chen / Asst. Supervisor
Sign for and on behalf of
SGS Taiwan Limited

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and Jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是根據本公司訂定之通用服務條款所製作發放。請注意此條款列印於背面。將本公司之義務、免責、管轄權聲明確切範疇。此報告結果除另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd | No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
台灣檢驗科技股份有限公司 | t (886-7) 323-0920 | f (886-7) 315-7484 | www.sgs.com.tw
Member of the SGS Group

SGS Report of Solder (Continue)



TEST REPORT

REPORT NO. KA/2005/91321/A-1

DATE: 2005/9/29

PAGE: 2 OF 3

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
PBDEs(Polybrominated biphenyl ethers)	---	---	---	---
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	n.d.
Dibromobiphenyl ether	%		0.0005	n.d.
Tribromobiphenyl ether	%		0.0005	n.d.
Tetrabromobiphenyl ether	%		0.0005	n.d.
Pentabromobiphenyl ether	%		0.0005	n.d.
Hexabromobiphenyl ether	%		0.0005	n.d.
Heptabromobiphenyl ether	%		0.0005	n.d.
Octabromobiphenyl ether	%		0.0005	n.d.
Nonabromobiphenyl ether	%		0.0005	n.d.
Decabromobiphenyl ether	%		0.0005	n.d.

NOTE: 1. n.d. = not detected.

2. DET. LMT = DETECTION LIMIT.

<END>

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是遵照本公司訂定之通用服務條款所製作發放。請注意此條款列印於背面，將本公司之義務、免責、管轄權聲明確切。此報告結果除非另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd.
台灣檢驗科技股份有限公司

No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan /
t (886-7) 323-0920

f (886-7) 315-7484

高雄市三民區中華二路208號
www.sgs.com.tw

Member of the SGS Group

SGS Report of Solder (Continue)



REPORT NO. KA/2005/91321/A-1
DATE: 2005/9/29
PAGE: 3 OF 3



This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and Jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是遵照本公司訂定之通用服務條款所製作發放。請注意此條款列印於背面。將本公司之服務、免費、管轄權聲明權視之。此報告結果除非另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd.
台灣檢驗科技股份有限公司

No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
t (886-7) 325-0920 f (886-7) 315-7484 www.sgs.com.tw

Member of the SGS Group

SGS Report of I-Pex Connector



TEST REPORT

REPORT NO. KA/2005/A1103
 DATE: 2005/10/31
 PAGE: 1 OF 3

THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED AND IDENTIFIED BY THE CLIENT AS :

CLIENT : YAGEO CORPORATION NANTZE BRANCH.
 : 16, WEST 3RD, N.E.P.Z. P.O. BOX 35-106 KAOHSIUNG, TAIWAN R.O.C.
 PRODUCT DESCRIPTION : I-PEX CONNECTOR.
 SAMPLE : AS ATTACHED PHOTO.
 TESTING DATE : 2005/10/24 TO 2005/10/31.
 SAMPLE RECEIVED : 2005/10/24.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122 :2001 or other acid digestion.	2	n.d.
Chromium VI (Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A.	2	n.d.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	n.d.
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	n.d.
PBBs(Polybrominated biphenyls)	---	---	---	---
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	n.d.
Dibromobiphenyl	%		0.0005	n.d.
Tribromobiphenyl	%		0.0005	n.d.
Tetrabromobiphenyl	%		0.0005	n.d.
Pentabromobiphenyl	%		0.0005	n.d.
Hexabromobiphenyl	%		0.0005	n.d.
Heptabromobiphenyl	%		0.0005	n.d.
Octabromobiphenyl	%		0.0005	n.d.
Nonabromobiphenyl	%		0.0005	n.d.
Decabromobiphenyl	%		0.0005	n.d.



Kueilan Chen

Kueilan Chen / Asst. Supervisor
 Sign for and on behalf of
 SGS Taiwan Limited

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and Jurisdictional Issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是根據本公司訂定之通用檢驗條款所製作發給。請注意此條款列印於背面。將本公司之義務、免責、管轄權皆明確規範之。此報告結果除非另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部分複製。

SGS Taiwan Ltd. No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
 台灣檢驗科技股份有限公司 t (886-7) 323-0920 f (886-7) 313-7484 www.sgs.com.tw
 Member of the SGS Group

SGS Report of I-Pex Connector (Continue)



TEST REPORT

REPORT NO. KA/2005/A1103
 DATE: 2005/10/31
 PAGE: 2 OF 3

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
PBDEs(Polybrominated biphenyl ethers)	---	---	---	---
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 78/769/EEC)	0.0005	n.d.
Dibromobiphenyl ether	%		0.0005	n.d.
Tribromobiphenyl ether	%		0.0005	n.d.
Tetrabromobiphenyl ether	%		0.0005	n.d.
Pentabromobiphenyl ether	%		0.0005	n.d.
Hexabromobiphenyl ether	%		0.0005	n.d.
Heptabromobiphenyl ether	%		0.0005	n.d.
Octabromobiphenyl ether	%		0.0005	n.d.
Nonabromobiphenyl ether	%		0.0005	n.d.
Decabromobiphenyl ether	%		0.0005	n.d.

NOTE : 1. n.d. = not detected.
 2. DET. LMT = DETECTION LIMIT.

<END>

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是根據本公司訂定之通用服務條款所製作發放。請注意此報告列印於背面。將本公司之義務、免責、管轄權皆明確規範之。此報告結果除與另有說明區別檢驗之樣品真實。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd.
 台灣檢驗科技股份有限公司

No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
 t (886-7) 323-0920 f (886-7) 315-7484 www.sgs.com.tw

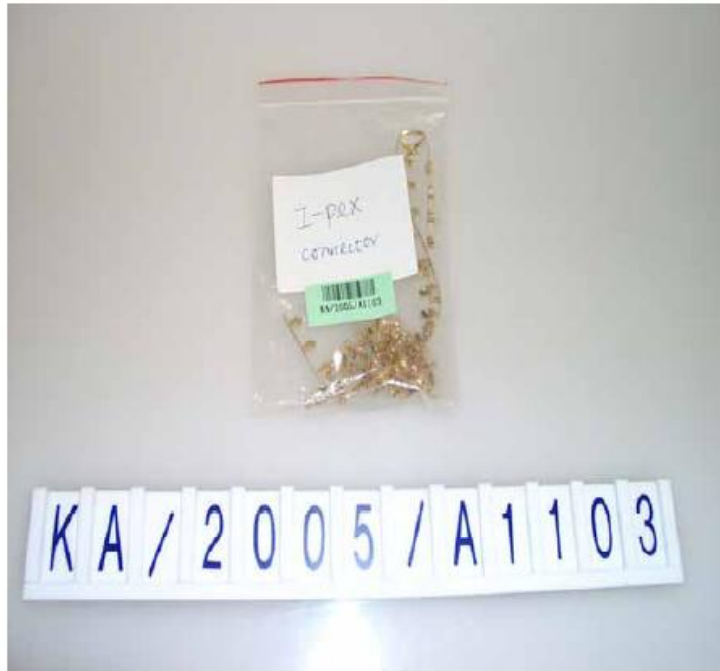
Member of the SGS Group

SGS Report of I-Pex Connector (Continue)



TEST REPORT

REPORT NO. KA/2005/A1103
DATE: 2005/10/31
PAGE: 3 OF 3



This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是根據本公司訂定之通用服務條款所製作發放。請注意此條款列印於背面。將本公司之義務、免責、管轄權皆明確規範之。此報告結果除非另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd.
台灣檢驗科技股份有限公司

No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan /
t (886-7) 323-0920 f (886-7) 315-7484

高雄市三民區中華二路208號
WWW.SGS.COM.TW

Member of the SGS Group

SGS Report of Gray Cable (Continue)



Test Report

YAGEO CORPORATION
16, WEST 3TH, N.E.P.Z. P.O. BOX 35-106 KAOHSIUNG,
TAIWAN, R.O.C.

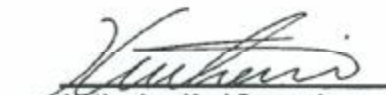
Report No. : KA/2006/81967
Date : 2006/8/25
Page : 1 of 4



The following sample(s) was/were submitted and identified by/on behalf of the client as :

Sample Description : ANTENNA CABLE(GRAY COLOR)
Style/Item No. : NISSEI
Sample Received : 2006/08/23
Testing Date : 2006/08/23 TO 2006/8/25

Test Result(s) : - Please see the next page(s) -


Katherine Ho / Supervisor
Signed for and on behalf of
SGS Taiwan Limited

This document is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional clauses defined therein. Unless otherwise stated, the results shown in this report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or fabrication of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 此報告係根據本公司訂定之通用檢驗條款所製作發出，請注意此條款列明於背面，亦可至 www.sgs.com 中查閱。倘本公司之檢驗、鑑定、實地檢驗或檢驗結果之結果只有說明，此報告結果僅針對檢驗之樣品負責，不得對其他本公司檢驗許可、許可或檢驗、對本報告內容或外觀之任何不正確性之聲索、抗議、聲索或訴訟。這和所有會與此報告。

TW 3752752

SGS Taiwan Ltd. | No. 208, Chung Hwa 2nd Road San Min District Kaohsiung, Taiwan. / 高雄市三民區中華二路208號
台灣檢驗科技股份有限公司 | (886-7) 323-8920 | (886-7) 315-7464 | www.tw.sgs.com

Member of SGS Group

SGS Report of Gray Cable (Continue)



Test Report

YAGEO CORPORATION
16, WEST 3TH, N.E.P.Z. P.O. BOX 35-106 KAOHSIUNG,
TAIWAN, R.O.C.

Report No. : KA/2006/81967
Date : 2006/8/25
Page : 2 of 4



Test Result(s)

PART NAME NO.1 : GRAY JACKET(OUTER CLADDING)
PART NAME NO.2 : COPPER ALLOY AXLE INSIDE CABLE
PART NAME NO.3 : INSULATOR(INNER CLADDING)

Test Item (s)	Unit	Method	MDL	Result		
				No.1	No.2	No.3
Cadmium (Cd)	mg/kg (ppm)	With reference to EN 1122; method B:2001. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.
Chromium VI (Cr+6)	mg/kg (ppm)	With refercece to US EPA 3060A. Analysis was performed by UV-VIS (US EPA 7196A)	2	N.D.	N.D.	N.D.
Mercury (Hg)	mg/kg (ppm)	With reference to US EPA 3052. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.
Lead (Pb)	mg/kg (ppm)	With reference to US EPA 3050B. Analysis was performed by ICP-AES.	2	N.D.	11.1	N.D.
PBBs(Polybrominated biphenyls)	---	---	---	---	---	---
Monobromobiphenyl	mg/kg	With reference to USEPA3540C, Analysis was performed by GC/MS and screening via USEPA 3550C with GC/MS	5	N.D.	N.D.	N.D.
Dibromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Tribromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Tetrabromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Pentabromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Hexabromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Heptabromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Octabromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Nonabromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Decabromobiphenyl	mg/kg		5	N.D.	N.D.	N.D.
Total PBBs(Polybrominated biphenyls)/Sum of above	mg/kg (ppm)	-	N.D.	N.D.	N.D.	

This document is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated, the results shown in this test report refer only to the samples tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 此報告係根據本公司訂定之通用檢驗條件所發出。請注意此報告列印於背面，亦可向www.sgs.com中查詢。將本公司之標頭、免責、管轄權等明確與閣下。除非另有說明，此報告結果僅針對樣品之結果為真。本報告並非本公司對客戶之承諾，不可用於報關。對本報告內容或內容之任何未經授權之修改、偽造、篡改皆屬非法。違者將對本公司負法律責任。

TW 3752683

SGS Taiwan Ltd. No. 208, Cheng Hwa 2nd Road San Min District Kaohsiung, Taiwan. / 高雄市三民區中華二路208號
台灣檢驗科技股份有限公司 ☎(886-7) 323-0620 ☎(886-7) 315-7484 www.tw.sgs.com
Member of SGS Group

SGS Report of Gray Cable (Continue)



Test Report

YAGEO CORPORATION
16, WEST 3TH, N.E.P.Z. P.O. BOX 35-106 KAOHSIUNG,
TAIWAN, R.O.C.

Report No. : KA/2006/81967
Date : 2006/8/25
Page : 3 of 4



Test Item (s)	Unit	Method	MDL	Result		
				No.1	No.2	No.3
PBDEs(Polybrominated biphenyl ethers)	---	---	---	---	---	---
Monobromobiphenyl ether	mg/kg	With reference to USEPA3540C, Analysis was performed by GC/MS and screening via USEPA 3550C with GC/MS	5	N.D.	N.D.	N.D.
Dibromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Tribromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Tetrabromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Pentabromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Hexabromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Heptabromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Octabromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Nonabromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Decabromobiphenyl ether	mg/kg		5	N.D.	N.D.	N.D.
Total PBDEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above	mg/kg (ppm)		-	N.D.	N.D.	N.D.
Total of Mono to Nona-brominated biphenyl ether. (Note 4)	mg/kg (ppm)		-	N.D.	N.D.	N.D.

- NOTE: (1) N.D. = Not Detected (<MDL)
 (2) mg/kg = ppm, 0.1% = 1000 ppm(mg/kg), 0.0005% = 5 ppm(mg/kg)
 (3) MDL = Method Detection Limit
 (4) Decabromobiphenyl ether (DecaBDE) in polymeric applications is exempted by Commission Decision of 13 Oct 2005 amending Directive 2002/95/EC notified under document 2005/717/EC.
 (5) PBDEs=PBDEs=Polybrominated Diphenyl Ethers=PBDOs=PBBOs.
 (6) " - " = Not Regulated
 (7) " --- " = Not Applicable
 (8) Sample was totally digested for Pb, Cd, Hg.

This document is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 此報告是遵照本公司訂定之通用檢驗條款所製作發放。請注意此報告列明之內容，亦可上 www.sgs.com 中查閱。對本公司之義務、責任、管轄權等明確規範之。除另有說明外，此報告結果僅針對檢驗之樣品負責。未經本公司同意請勿，不可全部複製、對本報告內容或外觀之任何未經授權之變更、偽造、或仿製等行為，違犯者將會被依法追究。

TW 3752750

SGS Taiwan Ltd. No. 208, Chung Hwa 2nd Road San Min District Kaohsiung, Taiwan. / 高雄市三民區中華二路208號
 台灣檢驗科技股份有限公司 t (886-7) 323-0920 f (886-7) 315-7484 www.tw.sgs.com
 Member of SGS Group

SGS Report of Gray Cable



Test Report

YAGEO CORPORATION
16, WEST 3TH, N.E.P.Z. P.O. BOX 35-106 KAOHSIUNG,
TAIWAN, R.O.C.

Report No. : KA/2006/81967
Date : 2006/8/25
Page : 4 of 4



**** End of Report ****

This document is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or fabrication or the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 本報告係遵照本公司訂定之送件服務條款所製作發給。請注意本報告所列印字樣，亦可在 www.sgs.com 中國版。對本公司之權利、免責、管轄權有中國版載之。除非另有說明，此報告結果僅對所驗之樣品負責。本報告未經本公司同意前，不可加修複製。對本報告內容所載之任何未經授權之變更、偽造、篡改均屬非法。違反者將會被依法追訴。

TW 3752749

SGS Taiwan Ltd. | No. 208, Cheng Hwa 2nd Road San Min District Kaohsiung, Taiwan. / 高雄市三民區中華二路208號
 台灣檢驗科技股份有限公司 | 1886 71 323-0920 | 1886-71 315-7484 | www.tw.sgs.com
 Member of SGS Group

1001

SGS Report of Protective Tube



TEST REPORT

REPORT NO. KA/2005/91332
DATE: 2005/9/29
PAGE: 1 OF 7

THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED AND IDENTIFIED BY THE CLIENT AS :

CLIENT : YAGEO CORPORATION NANTZE BRANCH.
: 16, WEST 3RD, N.E. P.Z. P.O. BOX 35-106 KAOHSIUNG, TAIWAN, R.O.C..
PRODUCT DESCRIPTION : PROTECTION TUBE.
SAMPLE : AS ATTACHED PHOTO.
TESTING DATE : 2005/9/22 TO 2005/9/29 .
SAMPLE RECEIVED : 2005/09/22.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
Asbestos	---	---	---	---
Anthrophyllite(CAS NO.017068-78-9)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Crocidolite(CAS NO.012001-28-4)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Amosite(CAS NO.012172-73-5)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Tremolite(CAS NO.014567-73-8)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Chrysotile(CAS NO.012001-29-5)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Actinolite(CAS NO.013765-00-8)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Chlorinated Paraffin (C10~C13) (CAS NO:010871-28-2)	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by GC/MS or GC/ECD.	0.01	n.d.
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	n.d.
Chromium VI (Cr+6)	ppm	As per US EPA 7198A and US EPA 3060A.	2	n.d.
Formaldehyde(CAS No:000050-00-0)	ppm	With reference to DIN 53315 & USEPA 8315A. Analysis was performed by HPLC/DAD/MS.	0.2	n.d.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	n.d.
Mirex(CAS NO:002385-85-5)	ppm	Analysis was performed by GC/MS.	4	n.d.
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	n.d.



Kueilan Chen

Kueilan Chen / Asst. Supervisor
Sign for and on behalf of
SGS Taiwan Limited

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是遵照本公司訂定之通用服務條款所製作發款。請注意此報告列印於背面。將本公司之義務、免責、管轄權聲明建議。此報告結果除非另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd. No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
台灣檢驗科技股份有限公司 t (886-7) 323-0920 f (886-7) 313-7484 www.sgs.com.tw
Member of the SGS Group

SGS Report of Protective Tube (Continue)



TEST REPORT

REPORT NO. KA/2005/91332
DATE: 2005/9/29
PAGE: 2 OF 7

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
PBBs(Polybrominated biphenyls)	---	---	---	---
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	n.d.
Dibromobiphenyl	%		0.0005	n.d.
Tri bromobiphenyl	%		0.0005	n.d.
Tetrabromobiphenyl	%		0.0005	n.d.
Pentabromobiphenyl	%		0.0005	n.d.
Hexabromobiphenyl	%		0.0005	n.d.
Heptabromobiphenyl	%		0.0005	n.d.
Octabromobiphenyl	%		0.0005	n.d.
Nonabromobiphenyl	%		0.0005	n.d.
Decabromobiphenyl	%		0.0005	n.d.
PBDEs(Polybrominated biphenyl ethers)	---	---	---	---
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	n.d.
Dibromobiphenyl ether	%		0.0005	n.d.
Tri bromobiphenyl ether	%		0.0005	n.d.
Tetrabromobiphenyl ether	%		0.0005	n.d.
Pentabromobiphenyl ether	%		0.0005	n.d.
Hexabromobiphenyl ether	%		0.0005	n.d.
Heptabromobiphenyl ether	%		0.0005	n.d.
Octabromobiphenyl ether	%		0.0005	n.d.
Nonabromobiphenyl ether	%		0.0005	n.d.
Decabromobiphenyl ether	%		0.0005	n.d.
PCBs(Polychlorinated Biphenyls)(CAS NO:001336-36-3)	ppm	With reference to USEPA 8082A. Analysis was performed by GC/MS or GC/ECD.	0.5	n.d.
Polychlorinated Naphthalene	ppm	Analysis was performed by GC/MS.	5	n.d.
PCTs(Polychlorinated Terphenyls)	ppm	Analysis was performed by GC/MS or GC/ECD.	0.5	n.d.
PVC (CAS No:9002-98-2)	---	FTIR/ATR AND FLAME TEST	---	NEGATIVE
Organic-TIN compounds	---	---	---	---
Tributyl Tin(TBT)	ppm	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	n.d.
Triphenyl Tin(TPT)(CAS NO:000668-34-8)	ppm	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	n.d.
HCFC's(Hydrogenated chlorofluorocarbons)	---	With reference to US EPA 8260.	---	---
Hydrochlorofluorocarbon-21(CAS No.:000075-43-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-22(CAS No.:000075-45-6)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-31(CAS No.:000593-70-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告是遵照本公司訂定之通用服務條款所製作發放，請注意此報告列印於背面，將本公司之義務、免責、管轄權聲明細則。此報告結果除另有說明僅對檢驗之樣品負責，本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd. No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市中區中華二路208號
台灣檢驗科技股份有限公司 t (886-7) 323-0920 f (886-7) 313-7484 www.sgs.com.tw
Member of the SGS Group

SGS Report of Protective Tube (Continue)



TEST REPORT

REPORT NO. KA/2005/91332

DATE: 2005/9/29

PAGE: 3 OF 7

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
Hydrochlorofluorocarbon-121(CAS No.:000354-14-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-122(CAS No.:000354-21-2)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-123(CAS No.:000306-83-1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-124(CAS No.:002837-89-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-131(CAS No.:000359-28-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-132b(CAS No.:000471-43-2)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-133a(CAS No.:000075-88-7)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-141b(CAS No.:001717-00-6)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-142b	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-221	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-222(CAS No.:000422-30-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-223	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-224	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-225ca(CAS No.:000422-56-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-225cb(CAS No.:000507-55-1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-226(CAS No.:000431-87-8)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-231	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-232	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-233	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-234	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-235(CAS No.:013838-16-9)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告係根據本公司訂定之通用服務條款所發行。請注意此報告列明之資訊，將本公司之義務、免責、管轄權等明確列明。此報告結果並非另有說明之檢驗之產品負責。本報告未經本公司審閱許可，不可部分複製。

SGS Taiwan Ltd. No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
 台灣檢驗科技股份有限公司 (886-7) 323-0920 (886-7) 315-7484 www.sgs.com.tw
 Member of the SGS Group

SGS Report of Protective Tube (Continue)



TEST REPORT

REPORT NO. KA/2005/91332

DATE: 2005/9/29

PAGE: 4 OF 7

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
Hydrochlorofluorocarbon-241	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-242	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-243(CAS No.:000338-75-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-244	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-251	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-252	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-253(CAS No.:000354-06-1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-261(CAS No.:000420-97-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-262(CAS No.:000420-97-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
Hydrochlorofluorocarbon-271	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	n.d.
CFCs(Chlorofluorocarbons) & HALON	---	With reference to US EPA 8260.	---	---
Chlorofluorocarbon-11(CAS No:000075-69-4)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-12(CAS No:000075-71-8)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-113(CAS No:000076-13-1)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-114(CAS No:000076-14-2)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-115(CAS No:000076-15-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
HALON-1211	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
HALON-1301	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
HALON-2402	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-13(CAS No:000075-72-9)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-111(CAS No:000354-56-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告係根據本公司訂定之通用服務條款所製作發給，請注意此報告列印於背面，將本公司之義務、免責、管轄權聲明條讀之。此報告結果並非另有說明書對檢驗之產品負責。本報告未經本公司審閱許可，不可部份複製。

SGS Taiwan Ltd.
台灣檢驗科技股份有限公司

No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
t (886-7) 323-0920 f (886-7) 315-7484 www.sgs.com.tw

Member of the SGS Group

SGS Report of Protective Tube (Continue)



TEST REPORT

REPORT NO. KA/2005/91332

DATE: 2005/9/29

PAGE: 5 OF 7

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
Chlorofluorocarbon-112(CAS No.000076-12-0)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-211(CAS No.135401-87-5)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-212(CAS No.076564-99-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-213(CAS No.060285-54-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-214(CAS No.002268-46-4)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-215(CAS No.000076-17-5)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-216(CAS No.001652-80-8)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Chlorofluorocarbon-217(CAS No.000422-86-6)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Carbon Tetrachloride	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
Methyl Chloroform	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	n.d.
AZO	---	As per LMBG 8202-2	---	---
1):4-AMINODIPHENYL (CAS NO.92-67-1)	ppm	Analysis was performed by GC/MS.	3	n.d.
2):BENZIDINE (CAS NO.92-87-5)	ppm	Analysis was performed by GC/MS.	3	n.d.
3):4-CHLORO-O-TOLUIDINE (CAS NO.95-69-2)	ppm	Analysis was performed by GC/MS.	3	n.d.
4):2-NAPHTHYLAMINE (CAS NO.91-59-8)	ppm	Analysis was performed by GC/MS.	3	n.d.
5):O-AMINO-AZOTOLUENE (CAS NO.97-56-3)	ppm	Analysis was performed by GC/MS.	3	n.d.
6):2-AMINO-4-NITROTOLUENE (CAS NO.99-58-8)	ppm	Analysis was performed by GC/MS.	3	n.d.
7):P-CHLOROANILINE (CAS NO.106-47-8)	ppm	Analysis was performed by GC/MS.	3	n.d.
8):2,4-DIAMINOANISOLE (CAS NO.615-05-4)	ppm	Analysis was performed by GC/MS.	3	n.d.
9):4-DIAMINODIPHENYLMETHANE (CAS NO.101-77-9)	ppm	Analysis was performed by GC/MS.	3	n.d.
10):3,3-DICHLOROBENZIDINE (CAS NO.91-94-1)	ppm	Analysis was performed by GC/MS.	3	n.d.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告僅適用於本公司訂定之適用服務條款所製作之報告。請注意此報告列印於背面。將本公司之報告、複製、重印或轉售均屬嚴禁。此報告結果除另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd.
台灣檢驗科技股份有限公司

No. 208, Chung Hwa 2nd Road, San Ming District, Keelung, Taiwan / 高雄市三民區中華二路208號
t (886-7) 323-0920 f (886-7) 313-7484 www.sgs.com.tw

Member of the SGS Group

SGS Report of Protective Tube (Continue)



TEST REPORT

REPORT NO. KA/2005/91332
DATE: 2005/9/29
PAGE: 6 OF 7

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
11) 3,3-DIMETHOXYBENZIDINE (CAS NO. 119-90-4)	ppm	Analysis was performed by GC/MS.	3	n.d.
12) 3,3-DIMETHYLBENZIDINE (CAS NO. 119-93-7)	ppm	Analysis was performed by GC/MS.	3	n.d.
13) 3,3-DIMETHYL-4,4-DIAMINODIPHENYLMETHA (CAS NO. 838-88-0)	ppm	Analysis was performed by GC/MS.	3	n.d.
14) P-CRESIDINE(2-METHOXY-5-METHYLANILINE) (CAS NO. 120-71-8)	ppm	Analysis was performed by GC/MS.	3	n.d.
15) 4,4-METHYLENE-BIS-(2-CHLORANILINE) (CAS NO. 101-14-4)	ppm	Analysis was performed by GC/MS.	3	n.d.
16) 4,4-OXYDIANILINE (CAS NO. 101-80-4)	ppm	Analysis was performed by GC/MS.	3	n.d.
17) 4,4-THIODIANILINE (CAS NO. 139-65-1)	ppm	Analysis was performed by GC/MS.	3	n.d.
18) O-TOLUIDINE (CAS NO. 95-53-4)	ppm	Analysis was performed by GC/MS.	3	n.d.
19) 2,4-TOLUYLENDIAMINE (CAS NO. 95-80-7)	ppm	Analysis was performed by GC/MS.	3	n.d.
20) 2,4,5-TRIMETHYLANILINE (CAS NO. 137-17-7)	ppm	Analysis was performed by GC/MS.	3	n.d.
21) O-ANISIDINE (CAS NO. 90-04-0)	ppm	Analysis was performed by GC/MS.	3	n.d.
22) P-AMINOAZOBENZENE (CAS NO. 60-09-3)	ppm	Analysis was performed by GC/MS.	3	n.d.
Halogen	---	As per EN14582 method B.	---	---
Halogen-Chlorine (Cl)(CAS No.007782-50-5)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	n.d.
Halogen-Fluorine (F)(CAS No.007782-41-4)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	n.d.
Halogen-Bromine (Br)(CAS No.007726-95-5)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	n.d.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告係根據本公司訂定之通用服務條款所簽發，請注意此報告列印於背面，將本公司之義務、免責、管轄權聲明條項細之。此報告結果並非另有說明者對於檢驗之產品負責。本報告未經本公司書面許可，不可部分複製。

SGS Taiwan Ltd. No. 208, Chung Hwa 2nd Road, San Ming District, Kaohsiung, Taiwan / 高雄市三民區中華二路208號
台灣檢驗科技股份有限公司 t: (886-7) 323-0920 f: (886-7) 315-7484 www.sgs.com.tw
Member of the SGS Group

SGS Report of Protective Tube (Continue)



TEST REPORT

REPORT NO. KA/2005/91332

DATE: 2005/9/29

PAGE: 7 OF 7

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
Halogen-Iodine (I)(CAS No:007553-56-2)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	n.d.

NOTE : 1. n.d. = not detected.

2. DET. LMT = DETECTION LIMIT.

<END>

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification, and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. 此報告係根據本公司訂定之通用服務條款所製作發效。請注意此條款列於背面。將本公司之服務、免責、管轄權等明確規範之。此報告結果除另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

SGS Taiwan Ltd.
台灣檢驗科技股份有限公司

No. 208, Chung Hwa 2nd Road, San Ming District, Keelung, Taiwan / 高雄市三民區中華二路208號
t (886-7) 323-0920 f (886-7) 315-7484
www.sgs.com.tw

Member of the SGS Group

SGS Report of Mylar



Test Report

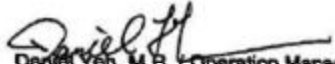
HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 1 of 15

The following merchandise was (were) submitted and identified by the client as :

Type of Product : POLYESTER FILM
Style/Item No : S10
Manufacturer/Vendor : TORAY
Country of Origin : JAPAN
Sample Received : 2005/09/23
Testing Date : 2005/09/23 TO 2005/10/03

Test Result : - Please see the next page -


Daniel Yeh, M.P., Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, Wu Ku Industrial Zone, Taipei county, Taiwan.
t:886-2) 22992329 5396-2) 2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 2 of 15

Test Result

PART NAME NO.1 : TRANSPARENT PLASTIC (PLEASE REFER TO THE PHOTO ATTACHED)

Test Item (s):	Unit	Method	MDL	Result
				No.1
Asbestos				
Anthrophyllite(CAS NO.017068-78-9)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative
Crocidolite(CAS NO.012001-28-4)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative
Amosite(CAS NO.012172-73-5)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative
Tremolite(CAS NO.014567-73-8)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative
Chrysotile(CAS NO.012001-29-5)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative
Actinolite(CAS NO.013768-00-8)	**	As per NIOSH 9000 method. Analysis was performed by XRD.	-	Negative

Test Item (s):	Unit	Method	MDL	Result
				No.1
AZO		As per LMBG 8202-2		
4-AMINODIPHENYL (CAS NO.92-67-1)	ppm	Analysis was performed by GC/MS.	3	N.D.
BENZIDINE (CAS NO.92-87-5)	ppm	Analysis was performed by GC/MS.	3	N.D.
4-CHLORO-O-TOLUIDINE (CAS NO.95-69-2)	ppm	Analysis was performed by GC/MS.	3	N.D.
2-NAPHTHYLAMINE (CAS NO.91-59-8)	ppm	Analysis was performed by GC/MS.	3	N.D.
O-AMINOAZOTOLUENE (CAS NO.97-56-3)	ppm	Analysis was performed by GC/MS.	3	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
t(886-2) 22963935 f(886-2) 2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 3 of 15

Test Item (s):	Unit	Method	MDL	Result
				No.1
2-AMINO-4-NITROTOLUENE (CAS NO.99-55-8)	ppm	Analysis was performed by GC/MS.	3	N.D.
P-CHLOROANILINE (CAS NO.106-47-8)	ppm	Analysis was performed by GC/MS.	3	N.D.
2,4-DIAMINOANISOLE (CAS NO.615-05-4)	ppm	Analysis was performed by GC/MS.	3	N.D.
4,4-DIAMINODIPHENYLMETHANE (CAS NO.101-77-9)	ppm	Analysis was performed by GC/MS.	3	N.D.
3,3-DICHLOROENZIDINE (CAS NO.91-94-1)	ppm	Analysis was performed by GC/MS.	3	N.D.
3,3-DIMETHOXYBENZIDINE (CAS NO.119-90-4)	ppm	Analysis was performed by GC/MS.	3	N.D.
3,3-DIMETHYLBENZIDINE (CAS NO.119-93-7)	ppm	Analysis was performed by GC/MS.	3	N.D.
3,3-DIMETHYL-4,4-DIAMINODIPHENYLMETHANE (CAS NO.838-88-0)	ppm	Analysis was performed by GC/MS.	3	N.D.
P-CRESIDINE(2-METHOXY-5-METHYLANILINE) (CAS NO.120-71-8)	ppm	Analysis was performed by GC/MS.	3	N.D.
4,4-METHYLENE-BIS-(2-CHLORANILINE) (CAS NO.101-14-4)	ppm	Analysis was performed by GC/MS.	3	N.D.
4,4-OXYDIANILINE (CAS NO.101-80-4)	ppm	Analysis was performed by GC/MS.	3	N.D.
4,4-THIODIANILINE (CAS NO.139-65-1)	ppm	Analysis was performed by GC/MS.	3	N.D.
O-TOLUIDINE (CAS NO.95-53-4)	ppm	Analysis was performed by GC/MS.	3	N.D.
2,4-TOLUYLENDIAMINE (CAS NO.95-80-7)	ppm	Analysis was performed by GC/MS.	3	N.D.
2,4,5-TRIMETHYLANILINE (CAS NO.137-17-7)	ppm	Analysis was performed by GC/MS.	3	N.D.
O-ANISIDINE (CAS NO.90-04-0)	ppm	Analysis was performed by GC/MS.	3	N.D.
P-AMINOAZOBENZENE (CAS NO.60-09-3)	ppm	Analysis was performed by GC/MS.	3	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
T(886-2) 22993939 F(886-2) 2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 4 of 15

Test Item (s):	Unit	Method	MDL	Result
				No.1
CFC's(Chlorofluorocarbons)		With reference to US EPA 8260.		
Group I				
Chlorofluorocarbon-11(CAS No:000075-69-4)	ppm	Analysis was performed by GC/MS.(CFC's(Chlorofluorocarbons))	1	N.D.
Chlorofluorocarbon-12(CAS No:000075-71-8)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-113(CAS No:000076-13-1)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-114(CAS No:000076-14-2)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-115(CAS No:000076-15-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Group III				
Chlorofluorocarbon-13(CAS No:000075-72-9)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-111(CAS No:000354-56-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-112(CAS No:000076-12-0)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-211(CAS No:135401-87-5)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-212(CAS No:076564-99-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-213(CAS No:060285-54-3)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.
Chlorofluorocarbon-214(CAS No:002268-46-4)	ppm	Analysis was performed by GC/MS. [CFC's (Chlorofluorocarbons)]	1	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED | NO. 135-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
T:886-21 22903434 F:886-21 2290-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 5 of 15

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Chlorofluorocarbon-215(CAS No:000076-17-5)	ppm	Analysis was performed by GC/MS. (CFC's (Chlorofluorocarbons))	1	N.D.
Chlorofluorocarbon-216(CAS No:001650-80-8)	ppm	Analysis was performed by GC/MS. (CFC's (Chlorofluorocarbons))	1	N.D.
Chlorofluorocarbon-217(CAS No:000422-85-6)	ppm	Analysis was performed by GC/MS. (CFC's (Chlorofluorocarbons))	1	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Chlorinated Paraffin (C10~C13) (CAS NO:010871-26-2)	%	With reference to USEPA3510C or USEPA3550C. Analysis was performed by GC/MS or GC/ECD.	0.01	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Formaldehyde(CAS No:000050-00-0)	ppm	With reference to DIN 53315 & US EPA 8315A. Analysis was performed by HPLC/DAD/MS	0.2	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Halon		With reference to US EPA 8260.		
Halon-1211	ppm	Analysis was performed by GC/MS. (CFC's (Chlorofluorocarbons))	1	N.D.
Halon-1301	ppm	Analysis was performed by GC/MS. (CFC's (Chlorofluorocarbons))	1	N.D.
Halon-2402	ppm	Analysis was performed by GC/MS. (CFC's (Chlorofluorocarbons))	1	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

SGS TAIWAN LIMITED NO. 136-1, Wu-Kung Road, Wu-Ku Industrial Zone, Taipei County, Taiwan.
TEL: (886-2) 22968299 (886-2) 2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 6 of 15

Test Item (s):	Unit	Method	MDL	Result
				No. 1
HCHFC's(Hydrogenated chlorofluorocarbons)		With reference to IIS EPA 8260.		
Hydrochlorofluorocarbon 21(CAS No.:000075-43-4)	ppm	Analysis was performed by GC/MS. [HCHFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-22(CAS No.:000075-45-6)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
[Hydrochlorofluorocarbon-31(CAS No.:000593-70-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon 121(CAS No.:000354-14-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
[Hydrochlorofluorocarbon-122(CAS No.:000319-21-2)	ppm	Analysis was performed by GC/MS. [HCHFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-123(CAS No.:000306-83-1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-124(CAS No.:002837-89-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
[Hydrochlorofluorocarbon-131(CAS No.:000359-20-4)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-131b(CAS No.:000471-43-2)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, Wuku Industrial Zone, Taipei county, Taiwan.
(886-2) 22992539 (886-2) 2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 7 of 15

Test Item (s)	Unit	Method	MDL	Result
				No.1
Hydrochlorofluorocarbon 133a(CAS No.:000075-88-7)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-141b(CAS No.:001717-00-5)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-221	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-222(CAS No.:000122-30-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon 223	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-224	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-225ca(CAS No.:000432-56-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-225cb(CAS No.:000507-55-1)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon 226(CAS No.:000431-87-3)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-231	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.

The content of this PDF file is in accordance with the original issued report for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
t886-(2) 22993939/3296-2/2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 8 of 15

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Hydrochlorofluorocarbon-232	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-233	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-234	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-235(CAS No.:013838-16-9)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-241	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-242	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-243(CAS No.:000338-75-0)	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-244	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-251	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.
Hydrochlorofluorocarbon-252	ppm	Analysis was performed by GC/MS. [HCFC's (Hydrogenated chlorofluorocarbons)]	1	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED | NO. 136-1, Wu Kong Road, Wu Ku Industrial Zone, Taipei county, Taiwan.
T:886-212299399 F:886-21229-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CR/2005/95657
Date : 2005/10/03
Page : 9 of 15

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Hydrochlorofluorocarbon-253(CAS No.:000394-06-1)	ppm	Analysis was performed by GC/MS. (HCFC's (Hydrogenated chlorofluorocarbons))	1	N.D.
Hydrochlorofluorocarbon-261(CAS No.:000420-97-3)	ppm	Analysis was performed by GC/MS. (HCFC's (Hydrogenated chlorofluorocarbons))	1	N.D.
Hydrochlorofluorocarbon-262(CAS No.:000420-97-3)	ppm	Analysis was performed by GC/MS. (HCFC's (Hydrogenated chlorofluorocarbons))	1	N.D.
Hydrochlorofluorocarbon-271	ppm	Analysis was performed by GC/MS. (HCFC's (Hydrogenated chlorofluorocarbons))	1	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No. 1
1,1,1-trichloroethane	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS.	1	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Carbon tetrachloride	ppm	With reference to US EPA 8260. Analysis was performed by GC/MS/HEADSPACE.	1	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Organic-tin compounds				
Triphenyl Tin(TPT)(CAS NO:000668-34-8)	ppm	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	N.D.
Tributyl Tin(TBT)	ppm	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
8866-2) 22992929 8866-2) 2299-3227 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/13
Page : 10 of 15

Test Item (s):	Unit	Method	MDL	Result
				No.1
PCBs(Polychlorinated Biphenyls)(CAS NO:001335-36-3)	ppm	With reference to USEPA 8082A. Analysis was performed by GC/MS or GC/MSD.	0.5	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No.1
Polychlorinated Naphthalene	ppm	With reference to USEPA 8081B. Analysis was performed by GC/MS.	5	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No.1
PCPs(Polychlorinated Terphenyls)	ppm	Analysis was performed by GC/MS or GC/MSD.	0.5	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No.1
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/254/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl	%		0.0005	N.D.
Tribromobiphenyl	%		0.0005	N.D.
Tetrabromobiphenyl	%		0.0005	N.D.
Pentabromobiphenyl	%		0.0005	N.D.
Hexabromobiphenyl	%		0.0005	N.D.
Heptabromobiphenyl	%		0.0005	N.D.
Octabromobiphenyl	%		0.0005	N.D.
Nonabromobiphenyl	%		0.0005	N.D.
Decabromobiphenyl	%		0.0005	N.D.
Total PBBs (Polybrominated biphenyls)/Sum of above	%		-	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

SGS TAIWAN LIMITED | NO. 136-1, Wu Kung Road, Wuku Industrial Zone, Taipei county, Taiwan.
8866-2) 22962856 (886-2) 2298-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 11 of 15

Test Item (s):	Unit	Method	MDL	Result
				No.1
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl ether	%		0.0005	N.D.
Tribromobiphenyl ether	%		0.0005	N.D.
Tetrabromobiphenyl ether	%		0.0005	N.D.
Pentabromobiphenyl ether	%		0.0005	N.D.
Hexabromobiphenyl ether	%		0.0005	N.D.
Heptabromobiphenyl ether	%		0.0005	N.D.
Octabromobiphenyl ether	%		0.0005	N.D.
Nonabromobiphenyl ether	%		0.0005	N.D.
Decabromobiphenyl ether	%		0.0005	N.D.
Total PBBEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above	%	-	N.D.	

Test Item (s):	Unit	Method	MDL	Result
				No.1
Halogen		As per EN14582 method B.		
Halogen-Chlorine (Cl)(CAS No:007782-50-5)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.
Halogen-Fluorine (F)(CAS No:007782-41-4)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.
Halogen-Bromine (Br)(CAS No:007726-95-6)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED | NO. 135-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
T/886-21 22993339 f/886-21 2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



Test Report

HOPE DISTRIBUTION INC.
 10F, NO. 111, SECC 1, KIOGLING RD., TAIPEI, TAIWAN

Report No. : CP/2005/95657
 Date : 2005/10/03
 Page : 12 of 15

Test Item (s):	Unit	Method	MDL	Result
				No.1
Halogen-Iodine (I)(CAS No:007553-56-2)	ppm	Filling the oxygen and absorb solution in the flask and take sample in the flask and burn it, the absorb solution was analyzed by IC method.	50	N.D.

Test Item (s):	Unit	Method	MDL	Result
				No.1
PVC (CAS No:9002-86-2)	**	Analysis was performed by FTIR/ATR and Pyrolyzer-GC/MS.	-	Negative

Test Item (s):	Unit	Method	MDL	Result
				No.1
Chromium VI (Cr+6)	ppm	UV VIS after reference to US EPA 8050A.	2	N.D.
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.

- NOTE: (1) N.D. = Not detected (<MDL)
 (2) ppm = mg/kg
 (3) MDL = Method Detection Limit
 (4) " - " = No Regulation
 (5) " --- " = Not Applicable
 (6) * = Results shown are of the adjusted analytical results
 (7) ** = Qualitative analysis (No Unit)
 (8) Negative = Undetectable / Positive = Detectable
 (9) The MDL is 5ppm for the single compound of CP

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company

SGS TAIWAN LIMITED NO. 135-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
 (886-2) 22993229 / (886-2) 2299-3237 www.sgs.com.tw

SGS Report of Mylar (Continue)



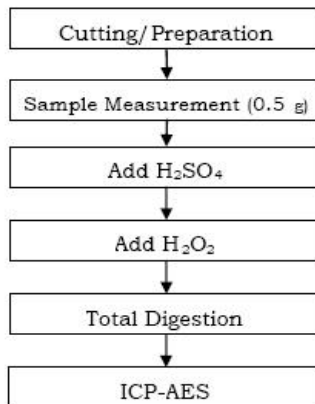
Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/03
Page : 13 of 15

These samples were dissolved totally by pre-conditioning method according to below flow chart.

Flow Chart of Digestion for Plastic – EN1122 for Cd (without residue)



The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

SGS TAIWAN LIMITED | NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.

SGS Report of Mylar (Continue)



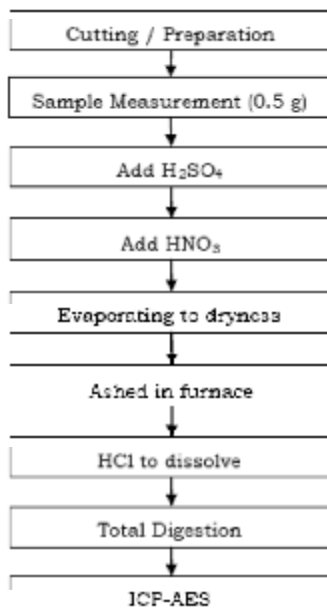
Test Report

HOPE DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : CE/2005/95657
Date : 2005/10/08
Page : 14 of 15

These samples were dissolved totally by pre-conditioning method according to below flow chart.

Flow Chart of Digestion for Plastic -Wet Decomposition for Pb (without residue)



The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

SGS TAIWAN LIMITED | NO. 106-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
1(886-2) 22993939 5(886-2) 2299-3237 www.sgs.com.tw

SGS Report of Mylar



Test Report

HOPIC DISTRIBUTION INC.
10F, NO. 111, SEC. 1, KEELUNG RD., TAIPEI, TAIWAN

Report No. : C10/2005/95657
Date : 2005/10/03
Page : 15 of 15



The content of this PDF file is in accordance with the original issued records for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

SGS TAIWAN LIMITED | NO. 136-1, Wu Kung Road, Wu Ku Industrial Zone, Taipei county, Taiwan.
t(886-2) 2299-3330 f(886-2) 2299-3237 www.sgs.com.tw