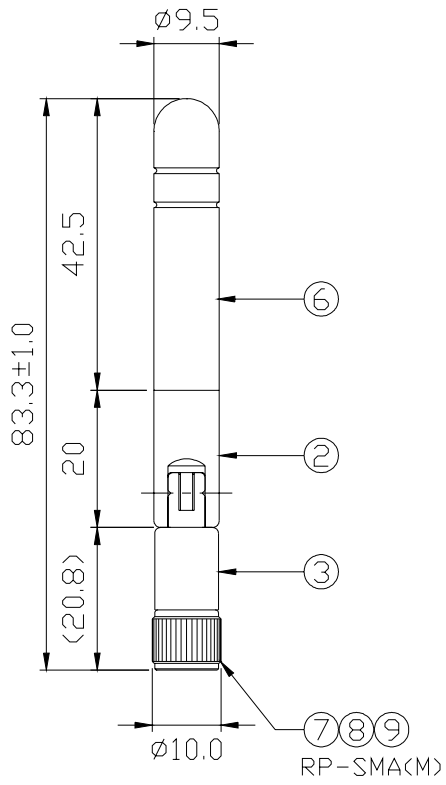
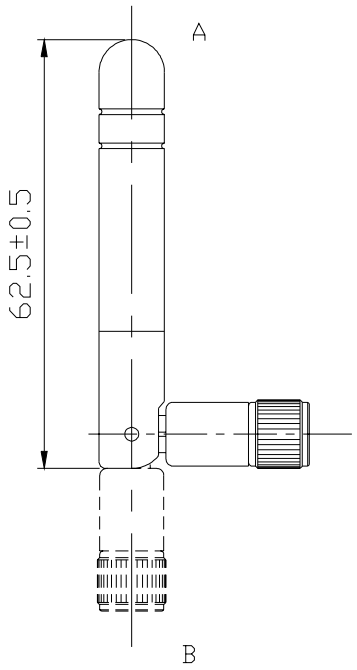
SPECIFICATION

1.	Description	：2.4G ANTENNA With SMA PLUG REVERSE
2.	Customer	：
3.	Model No.	：
4.	Part No.	：80SRP-A
5.	Standard	：IEEE 802.11b/g Wireless LAN
6.	Antenna Profile	：83.3mm (see Drawing)
7.	Color	：Black
8.	Electrical Characteristics	
	Operating Frequency	：2.4~2.5GHz
	Antenna Type	：1/4λ Dipole Sleeve
	Polarization Type	：Linear
	Type of Radiation	：Toroidal
	Peak Gain	：2.0 dBi Typical
	Impedance	：50 Ohm nominal
	V.S.W.R.	：2.0:1 Max.
9.	Mechanical Characteristics	
	Action	：Swivel Type
	Connector	：RP-SMA (M)
	Core	：N/A
10.	Raw Material	
	Coaxial Cable	：MIL-C-17 RG-178 B/U
	Housing	：TPU
	Hinge	：PC+ALLOY

TOLERANCES:	
X	± 1
X.X	± 0.5
X.XX	± 0.2
ANGULAR	± 5.0°

版次	修訂日期	ECR NO.	作 成	設 計 變 更 內 容 簡 述





作業說明：

1. 天線本體, WSW0001A 2dBi 天線作業標準指導書規定製作。
   依據 AQ-0001A QC管理工程圖 ,執行品質管制。

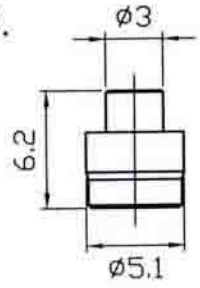
NO	材料名稱	環材	電腦編號	零件規格	顏色	切斷尺寸	用量	備註
9	Reverse SMA φ 10 本體	v	B02892200301A5	@028922003 SMA CONNECTOR 10φ	黑		1	或同級品
8	Reverse SMA φ 10 PIN絕緣	v	B02892200302A5	@028922003 SMA CONNECTOR 10φ母			1	或同級品
7	Reverse SMA ψ10 連接軸	v	B10874700000A5	@REVESE SMAφ10 連接軸 L=8.7 φ4.7銀	銀		1	或同級品
6	外套50.5L<黑>	v	B093505L0000WT	@9.3φ*50.5L 外套<黑>	黑		1	或同級品
5	銅管L26	v	B252L260000AME	@5.2φ*26.0L 銅管<平頭>	銀		1	或同級品
4	固定鉚釘(黑鋅)	!	B02892200140ME	028922001-4 3.80*1.90φ固定鉚釘<小>(黑鋅)	黑		2	或同級品
3	下座	v	699300000000IT	@IY113BK000 9.3φ 下座<黑>	黑		1	或同級品
2	上座黑	v	B095200L0000WT	@9.5φ*20.0L 上座黑	黑		1	或同級品
1	RG-178 Coaxial Cable	v	19RG17800030AE	@RG-178 CABLE 105SV(萬泰)	橙	80	1	或同級品

修訂日期：	制訂日期：2006/05/30			承認圖號			
頁數：1／1	核 准	審 查	作 成	品 名	2.4G ANTENNA With SMA PLUG REVERSE		
第三角法	Ryan	郭慧純	郭雅珍				
單位：mm				成品編號	80SRP-A	REV A	VERSION 1
比例：FREE							

主件品名材質一覽表			
項次	品名	材質	處理
1	本體-1	銅	鍍黑鉻
2	本體-2	銅	鍍黑鋅
3	連接軸	銅	鍍銀
4	PIN	磷青銅	鍍金
5	絕緣	鐵氟龍	白色

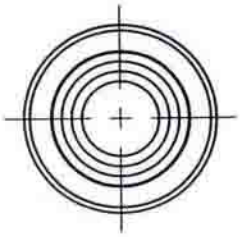
圖號 0202B

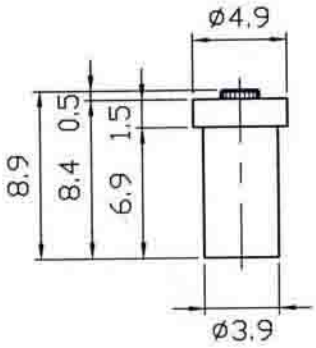
B.

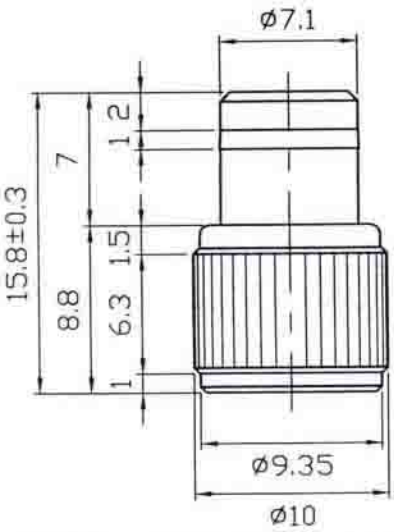


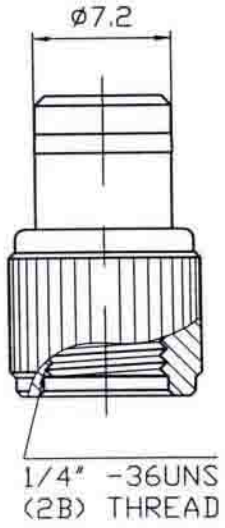
C. PIN與絕緣先行組合
PIN針需縮口處理

A.





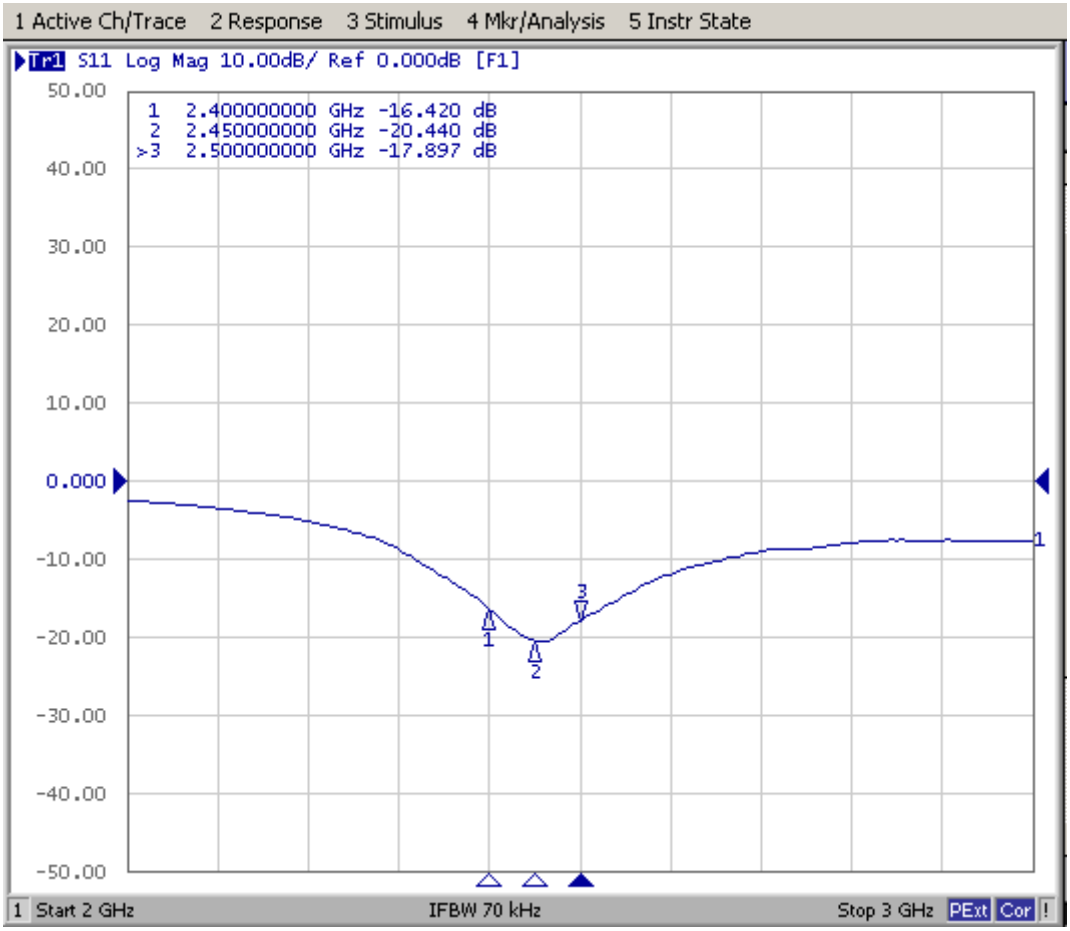




REV DESCRIPTION	UNIT: MM	MATERIAL:	NAME: RP-SMA(M) ϕ10.0mm
△x	SCALE: 3/1	FINISH:	PART NO: 0202B-承認書用
△x	TOLERANCES:	DRAWN:	DATE: 05.25.2003 REV: 00
△x	X ±0.15 X.X ±0.1	DESIGN:	
△x	X.XX ±0.05 ANGULAR ±1.0°	APPROVE: 陳志源	

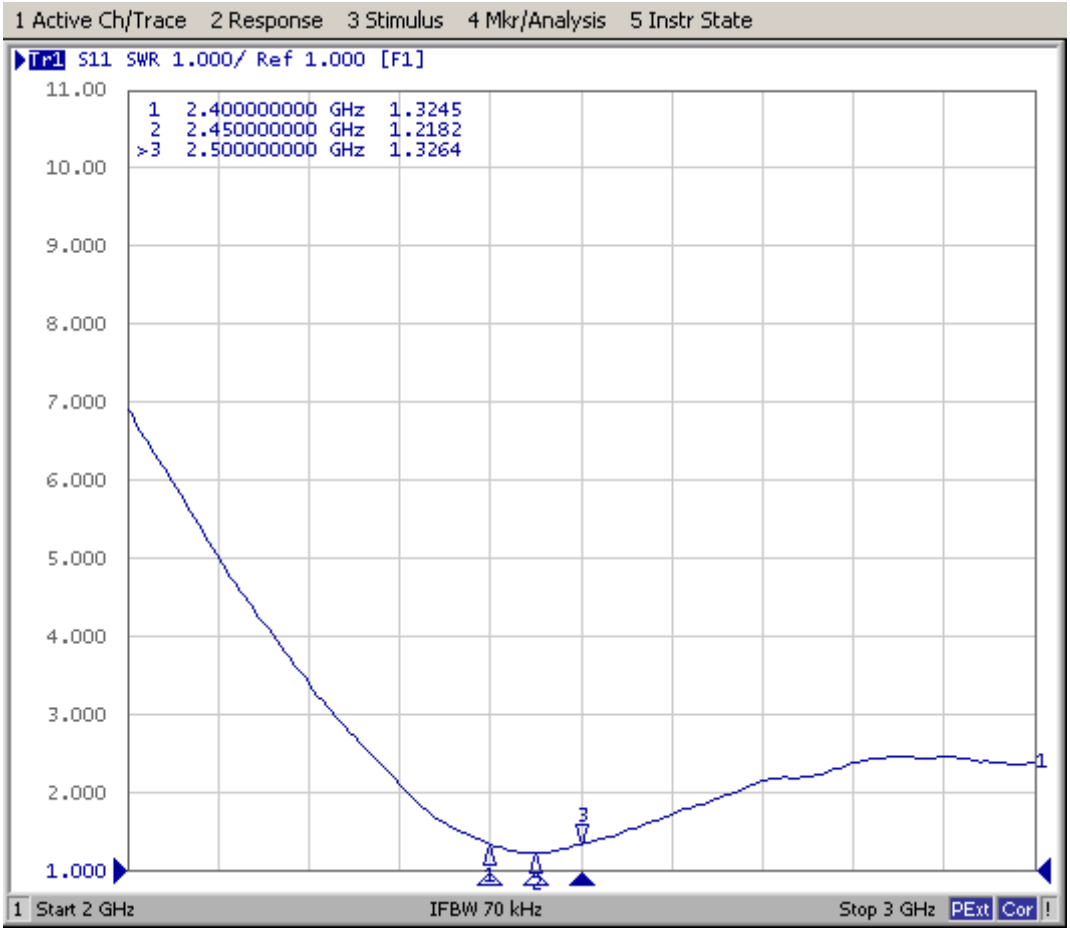
Electrical Properties

Return Loss



Electrical Properties

V.S.W.R

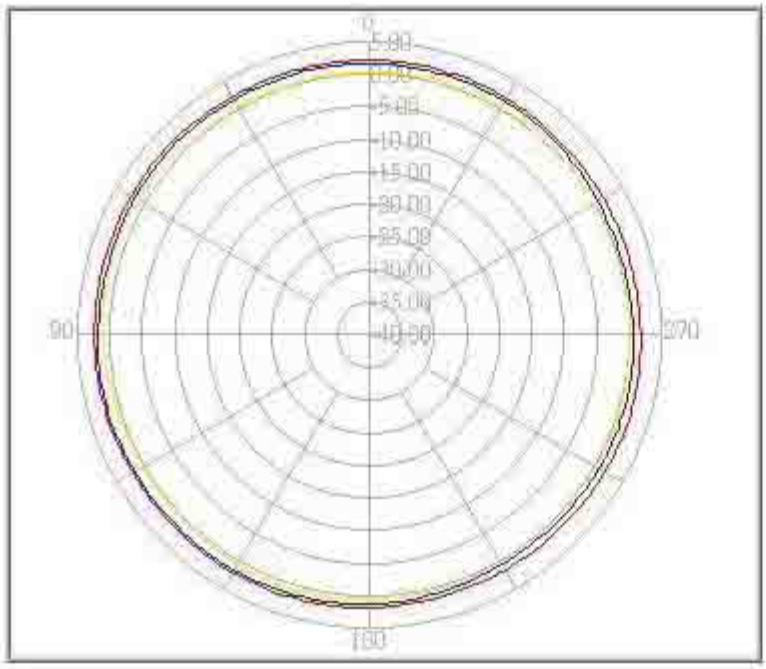


Electrical Properties

Radiation Pattern – H Plane

Model No: 16 **Antenna Position**: Vertical

Test Mode: H-PLANE



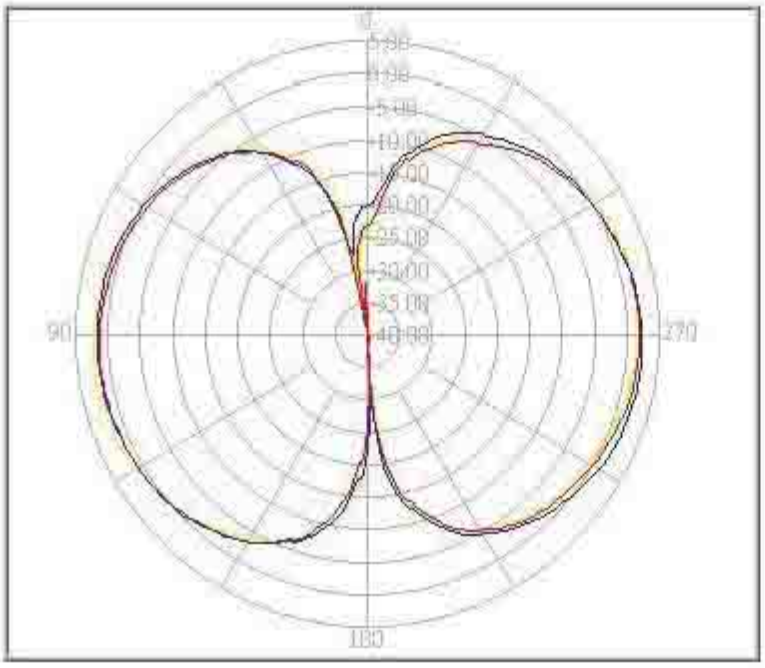
Freq (MHz)	peak (dBi)	Angle (o)	Avg (dBi)
2400.00	1.38	288.98	0.54
2450.00	2.52	302.45	2.05
2490.00	2.01	255.92	1.39

Electrical Properties

Radiation Pattern – E Plane

Model No: 16 **Antenna Position**: Horizontal

Test Mode: E-PLANE



Freq(MHz)	peak(dBi)	Angle(o)	Avg(dBi)
2400.00	2.33	263.27	-1.34
2450.00	1.97	90.61	-1.63
2490.00	2.37	95.51	-1.20

Coaxial Cable Data Sheet
RG-178

SPECIFICATION FOR APPROVAL

DOCUMENT: A30178B001

STYLE : 105℃ 30V
RG-178B/U

SIZE: 7/0.102 SCCS

RECOGNIZED: UL 1979

WONDERFUL HI-TECH CO.,LTD

OFFICE : 72WU KONG 6TH ROAD,
WU KU IND. DISTRICT
TAIPEI HSIEN,TAIWAN

TEL : (02)22988033
FAX : (02)22988031-2

FACTORY : 17 PEI YUAN ROAD,
CHUNG-LI IND. PARK
TAIWAN, R.O.C.

TEL : (03)4527777
FAX : (03)4517214

WONDERFUL HI-TECH CO., LTD
SPECIFICATION

STYLE	105℃ 30V UL1979	DOCUMENT NO : A30178B001	
SIZE	RG-178B/U	ESTABLISHED DATE: 2004/03/22	
STANDARD : MIL-C-17			
Conductor	Size	AWG	30
	Material	----	Silver-Coated Copper Clad Steel
	Conductors No.	----	7
	Conductors Size	mm	0.102
	O.D.	mm	0.30
Insulation	Average Thickness	mm	0.28
	Diameter	mm	0.86 ±0.03
	Material	----	FEP
	Color	----	Clear
Braid	Material	----	Silver-Coated Copper
	Construction	mm	16 / 3 / 0.10
	Coverage	%	95
Jacket	Average Thickness	mm	0.25
	Diameter	mm	1.80 ±0.05
	Material	----	FEP
	Color	----	Brown
Marking			
Drawing			

WONDERFUL HI-TECH CO., LTD.
SPECIFICATION

Electrical & Physical Properties			
Item			RG-178B/U
Rating Temp Voltage			105℃ 30V
Conductor Resistance			838 OHM/KM/20℃ MAX.
Insulation Resistance			3000 MEGA OHM/KM MIN.
Dielectric Strength			AC 500V/Minute
Spark Test			2.5 KV
Insulation	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / ㎟)
		Elongation	200% MIN.
	Aged	Tensile Strength	**UNAGED MIN 75%(168HRS×232℃)**
		Elongation	**UNAGED MIN 75%(168HRS×232℃)**
Jacket	Unaged	Tensile Strength	2500 PSI MIN.(1.76 Kg / ㎟)
		Elongation	200% MIN.
	Aged	Tensile Strength	**UNAGED MIN.75%(168HRS×232℃)**
		Elongation	**UNAGED MIN.75%(168HRS×232℃)**
Nom. Impedance			50 Ohms
Nom. Capacitance			95.8 pF/m
Nom. Vel. of Prop.			69.5%
VSWR (0 – 6 GHZ)			UNDER 1.3

Attenuation (dB/100m)	100MHz	1GHz	1.8GHz	2.4GHz	5.2GHz	6GHz
	46	155	295	340	505	550

測試報告

號碼 : CE/2007/64205A　　日期 : 2007/07/02　　頁數 : 1 of 8

萬泰科技股份有限公司
WONDERFUL HI-TECH CO., LTD.
桃園縣中壢市北園路17號
NO. 17, PEI-YUAN ROAD, CHUNG-LI IND. PARK, TAOYUAN, TAIWAN,
R. O. C.

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

樣品名稱(Sample Description)	:	RF COAXIAL CABLE
樣品型號(Style/Item No.)	:	RG-316/U, RG-179/U, RG-178B/U, RF405A MINI 1.48MM
收件日期(Sample Receiving Date)	:	2007/06/20
測試期間(Testing Period)	:	2007/06/20 TO 2007/06/26 AND 2007/06/27 TO 2007/07/02

==========

測試需求 / Test Requested : 參照 RoHS 2002/95/EC 及其修定指令要求. / In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

測試方法 / Test Method : 參考IEC 62321, Ed. 1 111/54/CDV方法檢測. / With reference to IEC 62321, Ed.1 111/54/CDV. Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products.

(1) 用感應藕合電漿原子發射光譜儀檢測鎘含量. / Determination of Cadmium by ICP-AES.

(2) 用感應藕合電漿原子發射光譜儀檢測鉛含量. / Determination of Lead by ICP-AES.

(3) 用感應藕合電漿原子發射光譜儀檢測汞含量. / Determination of Mercury by ICP-AES.

(4) 針對金屬材質之樣品, 用Spot test / Colorimetric方法檢測六價鉻含量. / Determination of Hexavalent Chromium for metallic samples by Spot test / Colorimetric Method.

(5) 針對非金屬材質之樣品, 用UV-VIS檢測六價鉻含量. / Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.

(6) 以氣相層析儀/質譜儀檢測多溴聯苯和多溴聯苯醚含量. / Determination of PBB and PBDE by GC/MS.

測試結果 / Test Result(s) : 請見下一頁.

Daniel Yeh, M.H. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei

萬泰科技股份有限公司
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R. O. C.

測試結果 (單位: mg/kg) / Test Result(s)

測試項目 / Test Item (s):	測試方法 Method (Refer to)	結果 / Result			方法偵測極限值 (MDL)
		No.1	No.2	No.3	
鎘 / Cadmium (Cd)	(1)	n.d.	n.d.	n.d.	2
鉛 / Lead (Pb)	(2)	n.d.	n.d.	n.d.	2
汞 / Mercury (Hg)	(3)	n.d.	n.d.	n.d.	2
六價鉻 / Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	(4)	Negative	---	Negative	See Note 5
六價鉻 / Hexavalent Chromium Cr(VI) by alkaline extraction	(5)	---	n.d.	---	2
多溴聯苯總和 / Sum of PBBs	(6)	---	n.d.	---	-
一溴聯苯 / Monobromobiphenyl		---	n.d.	---	5
二溴聯苯 / Dibromobiphenyl		---	n.d.	---	5
三溴聯苯 / Tribromobiphenyl		---	n.d.	---	5
四溴聯苯 / Tetrabromobiphenyl		---	n.d.	---	5
五溴聯苯 / Pentabromobiphenyl		---	n.d.	---	5
六溴聯苯 / Hexabromobiphenyl		---	n.d.	---	5
七溴聯苯 / Heptabromobiphenyl		---	n.d.	---	5
八溴聯苯 / Octabromobiphenyl		---	n.d.	---	5
九溴聯苯 / Nonabromobiphenyl		---	n.d.	---	5
十溴聯苯 / Decabromobiphenyl		---	n.d.	---	5
多溴聯苯醚總和 (一至九溴) / Sum of PBDEs (Mono to Nona) (Note 4)		---	n.d.	---	-
一溴聯苯醚 / Monobromobiphenyl ether		---	n.d.	---	5
二溴聯苯醚 / Dibromobiphenyl ether		---	n.d.	---	5
三溴聯苯醚 / Tribromobiphenyl ether		---	n.d.	---	5
四溴聯苯醚 / Tetrabromobiphenyl ether		---	n.d.	---	5
五溴聯苯醚 / Pentabromobiphenyl ether		---	n.d.	---	5
六溴聯苯醚 / Hexabromobiphenyl ether		---	n.d.	---	5
七溴聯苯醚 / Heptabromobiphenyl ether		---	n.d.	---	5
八溴聯苯醚 / Octabromobiphenyl ether		---	n.d.	---	5
九溴聯苯醚 / Nonabromobiphenyl ether		---	n.d.	---	5
十溴聯苯醚 / Decabromobiphenyl ether		---	n.d.	---	5
多溴聯苯醚總和 (一至十溴) / Sum of PBDEs (Mono to Deca)		---	n.d.	---	-

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R. O. C.

測試項目 / Test Item (s):	測試方法 Method (Refer to)	結果 / Result No.4	方法偵測極限值 (MDL)
鎘 / Cadmium (Cd)	(1)	n.d.	2
鉛 / Lead (Pb)	(2)	n.d.	2
汞 / Mercury (Hg)	(3)	n.d.	2
六價鉻 / Hexavalent Chromium Cr(VI) by alkaline extraction	(5)	n.d.	2
多溴聯苯總和 / Sum of PBBs		n.d.	-
一溴聯苯 / Monobromobiphenyl		n.d.	5
二溴聯苯 / Dibromobiphenyl		n.d.	5
三溴聯苯 / Tribromobiphenyl		n.d.	5
四溴聯苯 / Tetrabromobiphenyl		n.d.	5
五溴聯苯 / Pentabromobiphenyl		n.d.	5
六溴聯苯 / Hexabromobiphenyl		n.d.	5
七溴聯苯 / Heptabromobiphenyl		n.d.	5
八溴聯苯 / Octabromobiphenyl		n.d.	5
九溴聯苯 / Nonabromobiphenyl		n.d.	5
十溴聯苯 / Decabromobiphenyl		n.d.	5
多溴聯苯醚總和（一至九溴）/ Sum of PBDEs (Mono to Nona) (Note 4)	(6)	n.d.	-
一溴聯苯醚 / Monobromobiphenyl ether		n.d.	5
二溴聯苯醚 / Dibromobiphenyl ether		n.d.	5
三溴聯苯醚 / Tribromobiphenyl ether		n.d.	5
四溴聯苯醚 / Tetrabromobiphenyl ether		n.d.	5
五溴聯苯醚 / Pentabromobiphenyl ether		n.d.	5
六溴聯苯醚 / Hexabromobiphenyl ether		n.d.	5
七溴聯苯醚 / Heptabromobiphenyl ether		n.d.	5
八溴聯苯醚 / Octabromobiphenyl ether		n.d.	5
九溴聯苯醚 / Nonabromobiphenyl ether		n.d.	5
十溴聯苯醚 / Decabromobiphenyl ether		n.d.	5
多溴聯苯醚總和（一至十溴）/ Sum of PBDEs (Mono to Deca)		n.d.	-

測試報告

號碼 : CE/2007/64205A　日期 : 2007/07/02　頁數 : 4 of 8

萬泰科技股份有限公司
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R. O. C.

測試部位描述 / TEST PART DESCRIPTION:

NO.1 : 銀色金屬線(含鍍層) / SILVER COLORED METAL WIRE (INCLUDING THE PLATING LAYER)
NO.2 : 透明塑膠外被 / TRANSPARENT PLASTIC JACKET
NO.3 : 銀色金屬線(含鍍層) / SILVER COLORED METAL WIRE (INCLUDING THE PLATING LAYER)
NO.4 : 桔色塑膠外被 / ORANGE PLASTIC JACKET

Note : 1. mg/kg = ppm
2. n.d. = Not Detected / 未檢出
3. MDL = Method Detection Limit / 方法偵測極限值
4. According to 2005/717/EC DecaBDE is exempt.
根據2005年10月13日歐盟會議公佈2005/717/EC，修訂2002/95/EC內容，通過解除高分子材質中十溴聯苯醚之使用限制。
5. Spot-test:
Negative = Absence of Cr(VI) coating / surface layer,
Positive = Presence of Cr(VI) coating / surface layer;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)
Negative=鍍層中偵測不到六價鉻, Positive= 鍍層中偵測到六價鉻;
當該測項無法確認時, 測試樣品可藉由boiling-water-extraction測試方法進一步確認
Boiling-water-extraction:
Negative = Absence of Cr(VI) coating / surface layer,
Positive = Presence of Cr(VI) coating / surface layer; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm^2 sample surface area.
Negative=鍍層中偵測不到六價鉻, Positive=鍍層中偵測到六價鉻;
該濃度溶液≧0.02 mg/kg with 50 cm^2 (sample surface area)
6. "-" = Not Regulated / 無規格值
7. "---" = Not Conducted / 未測項目
8. 樣品的測試是基於申請人要求混合測試，報告中的混合測試結果不代表其中個別單一材質的含量。 / The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.
9. The report number of CE/2007/64205 is invalid. / 原報告號碼CE/2007/64205作廢

萬泰科技股份有限公司
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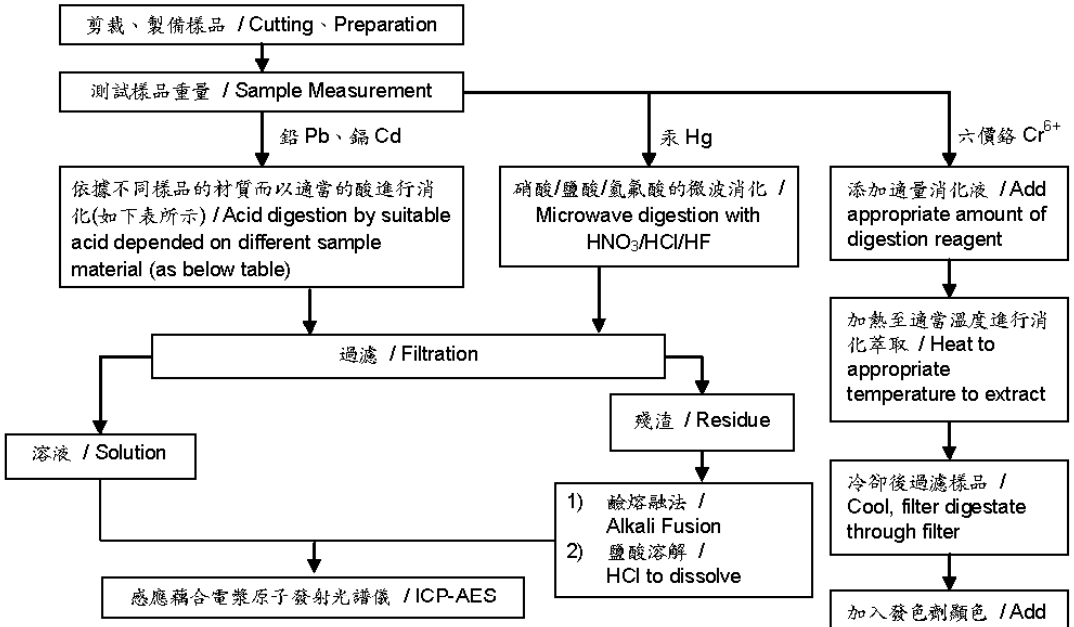
1) 根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外) / These samples were dissolved totally by pre-conditioning method according to below flow chart.（Cr^{6+} test method excluded）
2) 測試人員：張啓興 / Name of the person who made measurement: Troy Chang
3) 測試負責人：葉禮源 / Name of the person in charge of measurement: Daniel Yeh



樣品材質 / Sample Material	消化酸液種類 / Digestion Acid
鋼, 銅, 鋁, 焊錫 / Steel, copper, aluminum, solder	王水, 硝酸, 鹽酸, 氫氟酸, 雙氧水 / Aqua regia, HNO_3, HCl, HF, H_2O_2
玻璃 / Glass	硝酸,氫氟酸 / HNO_3/HF
金, 鉑, 鈀, 陶瓷 / Gold, platinum, palladium, ceramic	王水 / Aqua regia
銀 / Silver	硝酸 / HNO_3
塑膠 / Plastic	硫酸, 雙氧水, 硝酸, 鹽酸 / H_2SO_4, H_2O_2, HNO_3, HCl
其他 / Others	加入任何酸至完全溶解 / Any acid to total digestion

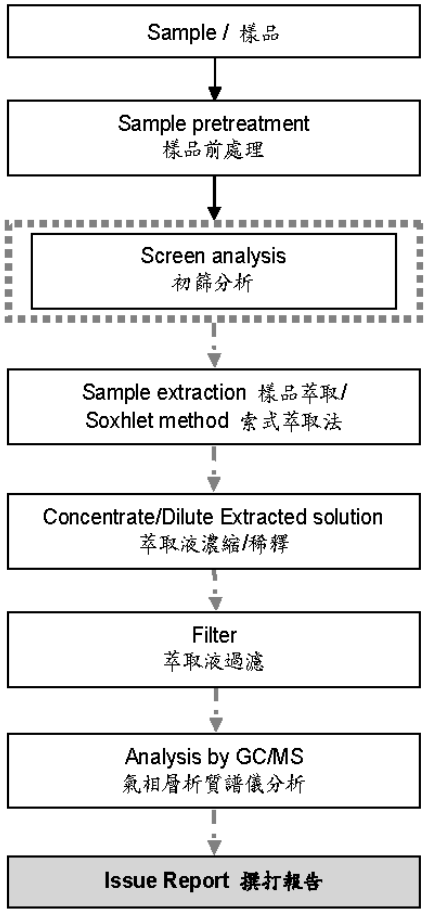
萬泰科技股份有限公司
WONDERFUL HI-TECH CO., LTD.
桃園縣中壢市北園路17號
NO. 17, PEI-YUAN ROAD, CHUNG-LI IND. PARK, TAOYUAN, TAIWAN,
R. O. C.

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

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 – · – ▶



萬泰科技股份有限公司
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萬泰科技股份有限公司
WONDERFUL HI-TECH CO., LTD.
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NO. 17, PEI-YUAN ROAD, CHUNG-LI IND. PARK, TAOYUAN, TAIWAN,
R. O. C.

** 報告結尾 **

Housing Material Data Sheet

- Housing

TO: [illegible] 22990746 P. 1/2

南 亞 塑 膠 工 業 股 份 有 限 公 司

NAN YA PLASTICS CORPORATION

Upittor 產品品質物性表

規格：TI90A （TPU） 日期：93.11.15

檢 驗 項 目（Items）	檢驗標準 ASTM	單 位（Units）	物性值（Value）
硬度（Hardness）	D 2240	Shore A	90
100%抗拉模數（100% Modulus）	D 412	Kg/cm^2	80
拉力強度（Tensile Strength）	D 412	Kg/cm^2	450
伸長率（Ultimate Elongation）	D 412	%	500
撕裂強度（Tear Strength）	D 412	Kg/cm	110
磨耗損失（Taber Abrasion）	D 1044	mg	<5
反撥彈性（Bayshore Rebound）	D 2632	%	>40
建議乾燥溫度（Pretreatment）	100℃、2～3 hrs		
建議加工溫度（Production conditions）	190～200℃		
TPU 類型（TPU type）	聚酯型（Ester type）		
成形方式（Molding）	射出成形（Injection Molding）		
特 性（Product Characteristic）	物性佳；易脫模；耐磨耗 Good physical properties, Mold release easily, and Good abrasion resistance		
用 途（Applications）	1. 工業零組件（Industrial elements） 2. 汽車配件（for Automobile） 3. 運動器材（for Athletics） 4. 其他如：錶帶、寵物用具、滾輪、扣具等。（Watch bands、pet appliances、discs and rings、buckles etc.）		

上述資料會因產品設計、處理，及加工方式與條件不同而有所變異，僅供參考。

2005. 1. 25

南亞塑膠工業股份有限公司
NAN YA PLASTICS CORPORATION

Upittor 產品品質物性表

規格：TI95A（TPU）　　日期：93.11.15

檢驗項目（Items）	檢驗標準 ASTM	單位（Units）	物性值（Value）
硬度（Hardness）	D 2240	Shore A	95
100%抗拉模數（100% Modulus）	D 412	Kg/cm^2	125
拉力強度（Tensile Strength）	D 412	Kg/cm^2	500
伸長率（Ultimate Elongation）	D 412	%	450
撕裂強度（Tear Strength）	D 412	Kg/cm	130
磨耗損失（Taber Abrasion）	D 1044	mg	<55
反撥彈性（Bayshore Rebound）	D 2632	%	>40
建議乾燥溫度（Pretreatment）	105℃、1～2 hrs		
建議加工溫度（Production conditions）	195～205℃		
TPU 類型（TPU type）	聚酯型（Ester type）		
成形方式（Molding）	射出成形（Injection Molding）		
特性（Product Characteristic）	物性佳；易脫模；耐磨耗 Good physical properties, Mold release easily, and Good abrasion resistance		
用途（Applications）	1. 工業零組件（Industrial elements） 2. 汽車配件（for Automobile） 3. 運動器材（for Athletics） 4. 其他如：錶帶、寵物用具、滾輪、扣具等。 （Watch bands、pet appliances、discs and rings、buckles etc.）		

上述資料會因產品設計、處理，及加工方式與條件不同而有所變異，僅供參考。

- Hinge(上座/下座) - PC+ALLOY

SHINBLEND®
ALLOY
ENGINEERING PLASTIC DIVISION

SHINKONG SYNTHETIC FIBERS CORPORATION
新光合成纖維股份有限公司
8th Fl., 123, Sec.2, Nanking East Road, Taipei, Taiwan
Tel : 886-2-2507-0131 886-2-2507-1[illegible]0Lines) 886-3-4932131-1730
Fax : 886-2-2506-8047 886-3-491-5563

Technical Data

SHINBLEND® A724NA
High Impact Grade / 超韌級 : AD4011

		Unit	Test Method	Values
Mechanical properties	**機械性質**			
Izod Impact(Notched) 23°C	衝擊強度	Kg-cm/cm	ASTM D256	85
-20°C	衝擊強度	Kg-cm/cm	ASTM D256	70
-40°C	衝擊強度	Kg-cm/cm	ASTM D256	65
Tensile Strength	拉伸強度	Kg/cm^2	ASTM D638	540
Elongation	拉伸率	%	ASTM D638	100
Flexural Strength	彎曲強度	Kg/cm^2	ASTM D790	800
Flexural Modulus	彎曲模數	Kg/cm^2	ASTM D790	20000
Thermal properties	**熱性質**			
Heat Deflection Temperature	熱變形溫度		ASTM D648	
66psi		°C		-
264psi		°C		100
Flammability	防火性	-	UL94	-
Melting Point	熔點	°C	DSC	223
Electrical properties	**電氣性質**			
Dielectric Strength	介電強度	KV/MM	ASTM D149	-
Dielectric Constant	介電常數	...	ASTM D150	-
Volume Resistivity	體積電阻	Ω-CM	ASTM D257	-
Other properties	**其它性質**			
Specific Gravity	比重	-	ASTM D792	1.19
Water Absorption	吸水率	%	ASTM D570	0.14
Mold Shrinkage	成形收縮率		ASTM D955	
Flow	流動方向	%		0.4~0.6
Cross Flow	垂直方向	%		0.5~0.7

To: 程子良 高專

Test Report

No : CE/2006/84274 Date : 2006/11/24 Page: 1 of 3

NAN YA PLASTICS CORPORATION
65, WEIWANG ST., SHU LIN, TAIPEI, TAIWAN, R. O. C.

Report on the submitted sample said to be TPU.

Style/Item No	:	T195AP
Sample Receiving Date	:	2006/11/17
Testing Period	:	2006/11/17 TO 2006/11/24

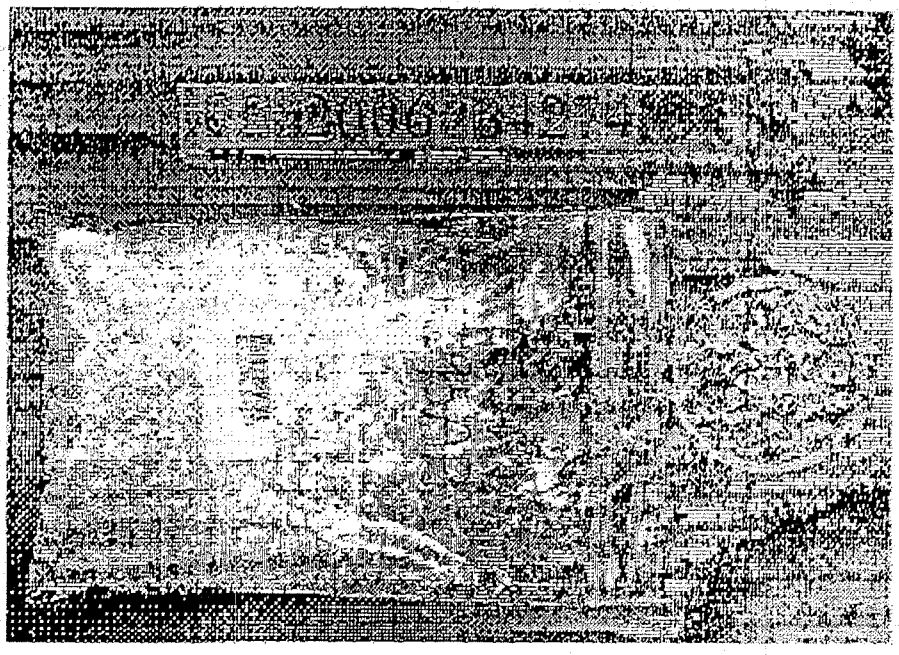
Test Requested	:	In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.
Test Method	:	(1) With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES. (2) With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES. (3) With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES. (4) With reference to US EPA Method 3060A & 7196A for Hexavalent Chromium for non-metallic samples. Analysis was performed by UV/Vis Spectrometry. (5) With reference to US EPA 3540C for PBBs/PBDEs Content. Analysis was performed by GC/MS.
Test Result(s)	:	Please refer to next page(s).
Conclusion	:	Based on the performed tests on submitted samples, the test results are compliant with the limits of RoHS Directive 2002/95/EC and its subsequent amendments.

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

Test Report

No : CE/2006/84274 Date : 2006/11/24 Page: 3 of 3

NAN YA PLASTICS CORPORATION
55, WEIWANG ST., SHU LIN, TAIPEI, TAIWAN, R. O. C.



** End of Report **

No. 134-1, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan
(886-2) 22993279 (886-2) 2299 3257 www.sgs.com.tw

Test Report

No : CE/2006/B4274 Date : 2006/11/24 Page: 2 of 3

NAN YA PLASTICS CORPORATION
65, WEIWANG ST., SHU LIN, TAIPEI, TAIWAN, R. O. C.

Test results by chemical method (Unit: mg/kg)

Test Item (s):	Method (Refer to)	Result No.1	MDL	RoHS Limit
Cadmium (Cd)	(1)	n.d.	2	100
Lead (Pb)	(2)	n.d.	2	1000
Mercury (Hg)	(3)	n.d.	2	1000
Hexavalent Chromium (CrVI)	(4)	n.d.	2	1000
Sum of PBBs		n.d.	-	1000
Monobromobiphenyl		n.d.	5	-
Dibromobiphenyl		n.d.	5	-
Tribromobiphenyl		n.d.	5	-
Tetrabromobiphenyl		n.d.	5	-
Pentabromobiphenyl		n.d.	5	-
Hexabromobiphenyl		n.d.	5	-
Heptabromobiphenyl		n.d.	5	-
Octabromobiphenyl		n.d.	5	-
Nonabromobiphenyl		n.d.	5	-
Decabromobiphenyl		n.d.	5	-
Sum of PBDEs (Mono to Nona) (Note 4)	(5)	n.d.	-	1000
Monobromobiphenyl ether		n.d.	5	-
Dibromobiphenyl ether		n.d.	5	-
Tribromobiphenyl ether		n.d.	5	-
Tetrabromobiphenyl ether		n.d.	5	-
Pentabromobiphenyl ether		n.d.	5	-
Hexabromobiphenyl ether		n.d.	5	-
Heptabromobiphenyl ether		n.d.	5	-
Octabromobiphenyl ether		n.d.	5	-
Nonabromobiphenyl ether		n.d.	5	-
Decabromobiphenyl ether		n.d.	5	-
Sum of PBDEs (Mono to Deca)		n.d.	-	-

Test Part Description:

NO.1 : TRANSPARENT PLASTIC PELLETS

Note : 1. mg/kg = ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. Sum of Mono to NonaBDE & according to 2005/717/EC DecaBDE is exempt.
5. "-" = Not Regulated

Test Report

No.: GZ0612183017/CHEM Date: DEC 15, 2006 Page 1 of 3

SHENZHEN CITY LIANFENG METAL PLASTIC PRODUCE CO., LTD. 1129 WORKSHOPS
LIULIAN LAOWEI VILLAGE INDUSTRIAL AREA, PINGDI TOWN, LONGGANG DISTRICT, SHENZHEN

Report on the submitted sample said to be 镀金产品

SGS Ref No.	: GZ10173051EC-3.3
Sample Receiving Date	: DEC 11, 2006
Testing Period	: DEC 11, 2006 TO DEC 15, 2006

Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method : With reference to IEC 62321 Ed.1 111/54/CDV
Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products
(1) Determination of Cadmium by ICP.
(2) Determination of Lead by ICP.
(3) Determination of Mercury by ICP.
(4) Determination of Hexavalent Chromium by Colorimetric Method.

Test Results : Please refer to next page.

Conclusion : Based on the performed tests on submitted sample(s), the results **comply with** the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of
SGS-CSTC Ltd.

Jiang YongPing, Terry
Sr. Engineer

Test results by chemical method (Unit: mg/kg)

Test Item(s):	Method (refer to)	No.1	MDL	RoHS Limit
Cadmium(Cd)	(1)	N.D.	2	100
Lead (Pb)	(2)	N.D.	2	1000
Mercury (Hg)	(3)	N.D.	2	1000
Hexavalent Chromium (CrVI) by Spot test	(4)	Negative	See Note 4	#

Test Part Description:
No.1 Golden plated metal

Note : 1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. **Spot-test:**
Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)
Boiling-water-extraction:
Negative = Absence of CrVI coating
Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm^2 sample surface area.
5. # = Positive indicates the presence of CrVI on the tested areas and result be regarded as conflict with RoHS requirement.
Negative indicates the absence of CrVI on the tested areas and result be regarded as no conflict with RoHS requirement.

Sample photo :

SGS authenticate the photo on original report only

*** End of Report ***

Test Report

No.: GZ0612183015/CHEM Date: DEC 15, 2006 Page 1 of 3

SHENZHEN CITY LIANFENG METAL PLASTIC PRODUCE CO., LTD. 1129 WORKSHOPS
LIULIAN LAOWEI VILLAGE INDUSTRIAL AREA, PINGDI TOWN, LONGGANG DISTRICT, SHENZHEN

Report on the submitted sample said to be 镀银端子

SGS Ref No.	: GZ10173051EC-3.1
Sample Receiving Date	: DEC 11, 2006
Testing Period	: DEC 11, 2006 TO DEC 15, 2006

Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method : With reference to IEC 62321 Ed.1 111/54/CDV
Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products
(1) Determination of Cadmium by ICP.
(2) Determination of Lead by ICP.
(3) Determination of Mercury by ICP.
(4) Determination of Hexavalent Chromium by Colorimetric Method.

Test Results : Please refer to next page.

Conclusion : Based on the performed tests on submitted sample(s), the results **comply with** the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of
SGS-CSTC Ltd.

Jiang YongPing, Terry
Sr. Engineer

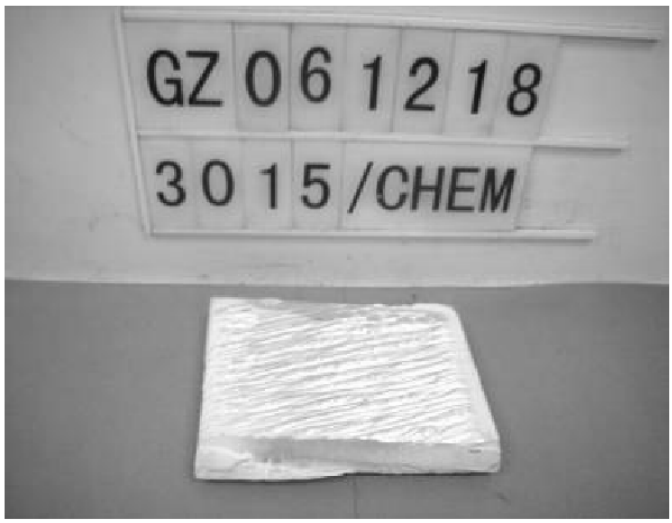
Test results by chemical method (Unit: mg/kg)

Test Item(s):	Method (refer to)	No.1	MDL	RoHS Limit
Cadmium(Cd)	(1)	N.D.	2	100
Lead (Pb)	(2)	N.D.	2	1000
Mercury (Hg)	(3)	N.D.	2	1000
Hexavalent Chromium (CrVI) by boiling water extraction	(4)	Negative	See Note 4	#

Test Part Description:
No.1 Silvery plated metal

Note : 1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. **Spot-test:**
Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)
Boiling-water-extraction:
Negative = Absence of CrVI coating
Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm^2 sample surface area.
5. # = Positive indicates the presence of CrVI on the tested areas and result be regarded as conflict with RoHS requirement.
Negative indicates the absence of CrVI on the tested areas and result be regarded as no conflict with RoHS requirement.

Sample photo :



SGS authenticate the photo on original report only

*** End of Report ***

SGS

Test Report

No.: GZ06061118488/CHEM Date: AUG 11, 2006 Page 1 of 1

SHENZHEN YOUXING (NANFANG) METAL FACTORY
NUMBER 8, HENGCHANG ROAD, XINGSHENG VILLAGE, LONGGANG TOWN, SHENZHEN CITY

Report on the submitted sample said to be 三价镀锌

SGS Ref No. : GZ10061836EC-3.1

Sample Receiving Date : AUG 01, 2006

Testing Period : AUG 01, 2006 TO AUG 08, 2006

Test Requested : As specified by client, to determine the Lead, Cadmium, Mercury & Hexavalent Chromium content in the submitted sample.

Test Method : Lead content - With reference to EPA 3050B: 1996 & other acid digestion.
Cadmium content - With reference to BS EN1122: 2001 method B & other acid digestion.
Mercury content - With reference to EPA 3052: 1996 & other acid digestion.
Hexavalent Chromium content - As specified by client, with reference to ISO 3613 : 2000 (Clause 5.6).
Analysis was performed by Atomic Absorption Spectrometer and Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) & UV-VIS Spectrophotometer.

Results

Item	Unit	MDL	Black plated metal screw
Lead Content (Pb)	ppm	2	4
Cadmium Content (Cd)	ppm	2	N.D.
Mercury Content (Hg)	ppm	2	N.D.
Hexavalent Chromium Content (Cr VI)	$\mu g/cm^2$	0.02	N.D.
	ppm	4	N.D.

Note : N.D. = Not Detected (< MDL)
MDL = Method Detection Limit
ppm = mg/kg
The result & MDL of Cr(VI) shown as "ppm" is calculated on 7μm electroplating (ρ=7.17g/cm^3) (this information was submitted by client), and it would be different if thickness and material of Electroplating differ from assumption.
This report is to supersede test report GZ06061118488/CHEM

*** End of Report ***

Signed for and on behalf of
SGS-CSTC Ltd.

Wang HongLei, Leo
Sr. Engineer

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Member of the SGS Group (SGS SA)

SGS

Test Report

No.: GC060902625 Date: SEP 19, 2006 Page 1 of 2

广东省东莞市卢鑫电子有限公司
广东省东莞市横沥镇河畔工业区中航厂内

Report on the submitted sample said to be 电容黑

SGS Ref No.	: GZ0609138243/CHEM
Buyer	. 制发
Sample Receiving Date	: SEP 06, 2006
Further Sample Receiving Date	. SEP 18, 2006
Testing Period	: SEP 06, 2006 TO SEP 19, 2006

Test Requested : As specified by client, to determine the Lead, Cadmium, Mercury & Hexavalent Chromium content in the submitted sample.

Test Method : Lead content - With reference to EPA 3050B: 1996 & other acid digestion.
Cadmium content - With reference to BS EN1122: 2001 method B & other acid digestion.
Mercury content - With reference to EPA 3052: 1996 & EPA 7473: 1998 & other acid digestion.
Hexavalent Chromium content - With reference to EPA 3060A: 1996 & EPA 7196A: 1992.
Analysis was performed by Atomic Absorption Spectrometer & Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) & Direct Mercury analyzer & UV-VIS Spectrophotometer.

Results :

Item	Unit	MDL	Black liquid
Lead Content (Pb)	mg/kg	2	N.D.
Cadmium Content (Cd)	mg/kg	2	N.D.
Mercury Content (Hg)	mg/kg	2	N.D.
Hexavalent Chromium Content [Cr(VI)]	mg/kg	2	N.D.

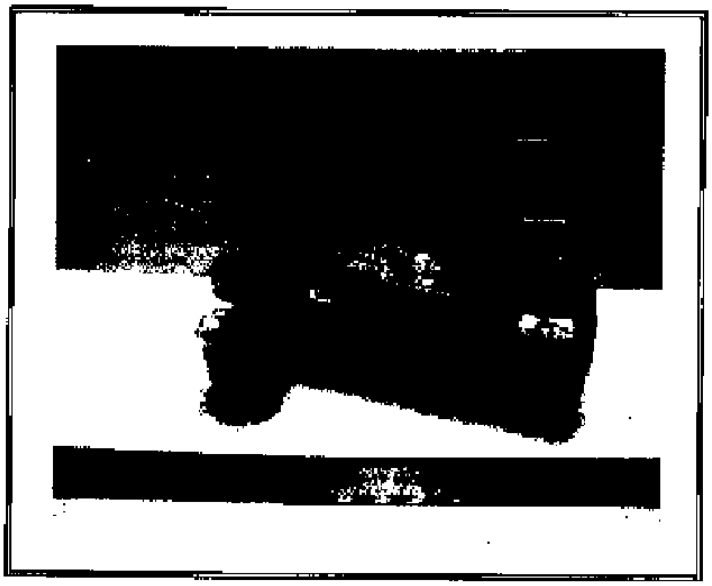
Note : - N.D. = Not Detected (< MDL)
- MDL = Method Detection Limit
- mg/kg = ppm

Signed for and on behalf of
SGS-CSTC Ltd.

May Huo
Engineer

SGS-CSTC Standards Technical Services Co., Ltd. | 198 Kezhu Road, Scientific Park, Guangzhou Economic & Technological Development District, China 510663 | t (86-20) 82155678 f (86-20) 82075080 www.cn.sgs.com
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 | t (86-20) 82155678 f (86-20) 82075080 e sgs.china@sgs.com

SAMPLE PHOTO



*** End of Report ***

中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155678 f (86-20) 82075080 www.cn.sgs.com e sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Intertek Labtest

TEST REPORT NUMBER: SZHJ095720

APPLICANT: SHEN ZHEN HUAER PRECISE PLASTIC HARDWARE NICETY PRODUCTS CO., LTD
25 BUILDING, HE SHUI KOU SECOND INDUSTRIAL ZONE, GONG MIN STREET, SHEN ZHEN CITY

DATE: Jan 16, 2007

ATTN: HUANG ZHI HUI

SAMPLE DESCRIPTION:
ONE (1) SUBMITTED SAMPLE SAID TO BE **WHITE PLASTIC (PTFE 铁氟龙绝缘子, 聚四氟乙烯绝缘子)**.
****

TESTS CONDUCTED:
AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)
****

AUTHORIZED BY:
FOR INTERTEK TESTING SERVICES SHENZHEN LTD.

BEN N.L. LIN
GENERAL MANAGER

Intertek Labtest

TEST REPORT NUMBER: SZHJ095720

TESTS CONDUCTED

(A) TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	RESULT
CADMIUM (Cd) CONTENT (ppm)	ND(<2)
LEAD (Pb) CONTENT (ppm)	35
MERCURY (Hg) CONTENT (ppm)	ND(<2)
CHROMIUM (VI) (Cr^{6+}) CONTENT (ppm) (FOR NON-METAL)	ND(<1)
POLYBROMINATED BIPHENYLS (PBBs)	
MONOBROMOBIPHENYL (MonoBB) (ppm)	ND(<5)
DIBROMOBIPHENYL (DiBB) (ppm)	ND(<5)
TRIBROMOBIPHENYL (TriBB) (ppm)	ND(<5)
TETRABROMOBIPHENYL (TetraBB) (ppm)	ND(<5)
PENTABROMOBIPHENYL (PentaBB) (ppm)	ND(<5)
HEXABROMOBIPHENYL (HexaBB) (ppm)	ND(<5)
HEPTABROMOBIPHENYL (HeptaBB) (ppm)	ND(<5)
OCTABROMOBIPHENYL (OctaBB) (ppm)	ND(<5)
NONABROMOBIPHENYL (NonaBB) (ppm)	ND(<5)
DECABROMOBIPHENYL (DecaBB) (ppm)	ND(<5)
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	
MONOBROMODIPHENYL ETHER (MonoBDE) (ppm)	ND(<5)
DIBROMODIPHENYL ETHER (DiBDE) (ppm)	ND(<5)
TRIBROMODIPHENYL ETHER (TriBDE) (ppm)	ND(<5)
TETRABROMODIPHENYL ETHER (TetraBDE) (ppm)	ND(<5)
PENTABROMODIPHENYL ETHER (PentaBDE) (ppm)	ND(<5)
HEXABROMODIPHENYL ETHER (HexaBDE) (ppm)	ND(<5)
HEPTABROMODIPHENYL ETHER (HeptaBDE) (ppm)	ND(<5)
OCTABROMODIPHENYL ETHER (OctaBDE) (ppm)	ND(<5)
NONABROMODIPHENYL ETHER (NonaBDE) (ppm)	ND(<5)
DECABROMODIPHENYL ETHER (DecaBDE) (ppm)	ND(<5)

ppm = PARTS PER MILLION
ND = NOT DETECTED
< = LESS THAN
NOTE : DECABDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO RoHS DIRECTIVE AMENDMENT 2005/717/EC.

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Intertek Labtest

TEST REPORT NUMBER: SZHJ095720

TESTS CONDUCTED

(B) RoHS REQUIREMENT

RESTRICTED SUBSTANCE	LIMITS
CADMIUM (Cd)	0.01% (100 ppm)
LEAD (Pb)	0.1% (1000 ppm)
MERCURY (Hg)	0.1% (1000 ppm)
CHROMIUM (VI) (Cr^{6+})	0.1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs)	0.1% (1000 ppm)
POLYBROMINATED DIPHENYL EHTERS (PBDEs)	0.1% (1000 ppm)

THE ABOVE LIMITS WERE QUOTED FROM 2002/95/EC AND AMENDMENT 2005/618/EC FOR HOMOGENEOUS MATERIAL.

(C) TEST METHOD :

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
CADMIUM (Cd) CONTENT	WITH REFERENCE TO IN-HOUSE METHOD AND DETERMINED BY ICP - OES	2 ppm
LEAD (Pb) CONTENT	WITH REFERENCE TO IN-HOUSE METHOD AND DETERMINED BY ICP - OES	2 ppm
MERCURY (Hg) CONTENT	WITH REFERENCE TO IN-HOUSE METHOD AND DETERMINED BY ICP - OES	2 ppm
CHROMIUM (VI) (Cr^{6+}) CONTENT (FOR NON-METAL)	WITH REFERENCE TO US EPA 3060A & 7196A, BY ALKALINE DIGESTION AND DETERMINED BY UV - VIS SPECTROPHOTOMETER	1 ppm
POLYBROMINATED BIPHENYLS (PBB) & POLYBROMINATED DIPHENYL ETHERS (PBDE)	WITH REFERENCE TO US EPA 3540C, BY SOLVENT EXTRACTION AND DETERMINED BY GC/MS AND HPLC	5 ppm

DATE SAMPLE RECEIVED : JAN 15, 2007
TESTING PERIOD : JAN 15, 2007 TO JAN 16, 2007

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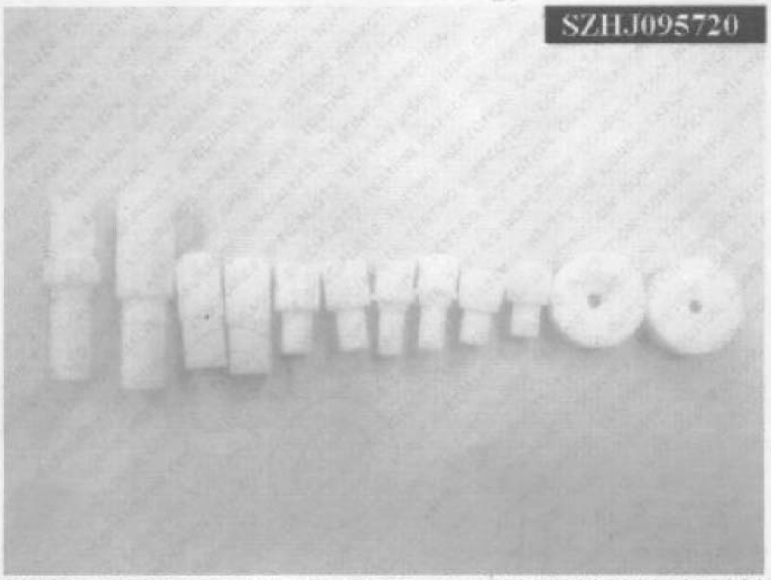
Intertek Labtest

TEST REPORT NUMBER: SZHJ095720

TESTS CONDUCTED



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END OF REPORT

测试报告

编号 : GZ0701002987/CHEM　　日期 : 2007 年 1 月 10 日　　页码 1 of 3

佛山市南海信兴铜业有限公司
佛山市南海区大沥奇槎铺前工业区

以下测试之样品是由申请者所提供及确认：3604 快削铜条

SGS 参考编号	: GC070100011-1
收板日期	: 2007 年 1 月 4 日
测试日期	: 2007 年 1 月 4 日至 2007 年 1 月 10 日

测 试 要 求　　: 按照 RoHS 指令 2002/95/EC 及其修订文件要求进行测试。

测 试 方 法　　: 参照 IEC 62321 Ed.1 111/54/CDV 电子电器产品中限用物质含量的测定程序
(1) 用 ICP 测定镉的含量
(2) 用 ICP 测定铅的含量
(3) 用 ICP 测定汞的含量
(4) 用比色法测定六价铬的含量

测 试 结 果　　: 请参见下一页

测 试 结 论　　: 基于所送样品进行的测试，测试结果与欧盟 RoHS 指令 2002/95/EC 以及后续修正指令的要求不相符。

Signed for and on behalf of
SGS-CSTC Ltd.

Jiang YongPing, Terry
Sr. Engineer

测试结果 (单位：毫克/千克)：

测试项目	参考方法	No.1	MDL	RoHS 限值
镉 (Cd)	(1)	31	2	100
铅 (Pb)	(2)	30648*	2	1000
汞 (Hg)	(3)	N.D.	2	1000
点测试法测六价铬(Cr VI)	(4)	Negative	参见注释 4	#

测试部件描述：
No.1 金色金属棒

注释：1. 毫克/千克 = ppm
2. N.D.= 未检出 (< MDL)
3. MDL = 方法检测限
4. **点测试：**
Negative = 未检测到六价铬，Positive = 检测到六价铬；
(如果点测试结果不能确认，测试样品将进一步由沸水萃取法进行测试)。
沸水萃取法：
Negative = 未检测到六价铬
Positive = 检测到六价铬；每 50cm^2 表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于 0.02mg/kg。
5. # Positive = 阳性,表示结果与 RoHS 要求相抵触
Negative = 阴性,表示结果与 RoHS 要求不相抵触
6. *: 表示超过限值
7. 本测试报告内容是参照报告编号为 GZ0701000033/CHEM 的中文译本，中英文版本如有歧异，概以英文版为准。

样品照片：

此图片仅限于随 SGS 正本报告使用

*** 报告完 ***

Test Report

No. : CE/2007/12587 Date : 2007/01/17 Page : 1 of 4

SHINKONG SYNTHETIC FIBERS CORPORATION

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

Sample Description	:	THERMOPLASTIC ALLOY RESIN
Style/Item No.	:	SHINBLEND ® ALLOY A724NA
Manufacturer/Vendor	:	SHINKONG SYNTHETIC FIBERS CORPORATION
Sample Receiving Date	:	2007/1/10
Testing Period	:	2007/1/10 TO 2007/01/17

==========

Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method : With reference to IEC 62321, Ed.1 111/54/CDV Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products.

(1) Determination of Cadmium by ICP-AES.
(2) Determination of Lead by ICP-AES.
(3) Determination of Mercury by ICP-AES.
(4) Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.
(5) Determination of PBB and PBDE by GC/MS.

Test Result(s) : Please refer to next page(s).

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

SHINKONG SYNTHETIC FIBERS CORPORATION

Test results by chemical method (Unit: mg/kg)

Test Item (s):	Method (Refer to)	Result No.1	MDL
Cadmium (Cd)	(1)	n.d.	2
Lead (Pb)	(2)	n.d.	2
Mercury (Hg)	(3)	n.d.	2
Hexavalent Chromium Cr(VI) by alkaline extraction	(4)	n.d.	2
Sum of PBBs		n.d.	-
Monobromobiphenyl		n.d.	5
Dibromobiphenyl		n.d.	5
Tribromobiphenyl		n.d.	5
Tetrabromobiphenyl		n.d.	5
Pentabromobiphenyl		n.d.	5
Hexabromobiphenyl		n.d.	5
Heptabromobiphenyl		n.d.	5
Octabromobiphenyl		n.d.	5
Nonabromobiphenyl		n.d.	5
Decabromobiphenyl		n.d.	5
Sum of PBDEs (Mono to Nona) (Note 4)	(5)	n.d.	-
Monobromobiphenyl ether		n.d.	5
Dibromobiphenyl ether		n.d.	5
Tribromobiphenyl ether		n.d.	5
Tetrabromobiphenyl ether		n.d.	5
Pentabromobiphenyl ether		n.d.	5
Hexabromobiphenyl ether		n.d.	5
Heptabromobiphenyl ether		n.d.	5
Octabromobiphenyl ether		n.d.	5
Nonabromobiphenyl ether		n.d.	5
Decabromobiphenyl ether		n.d.	5
Sum of PBDEs (Mono to Deca)		n.d.	-

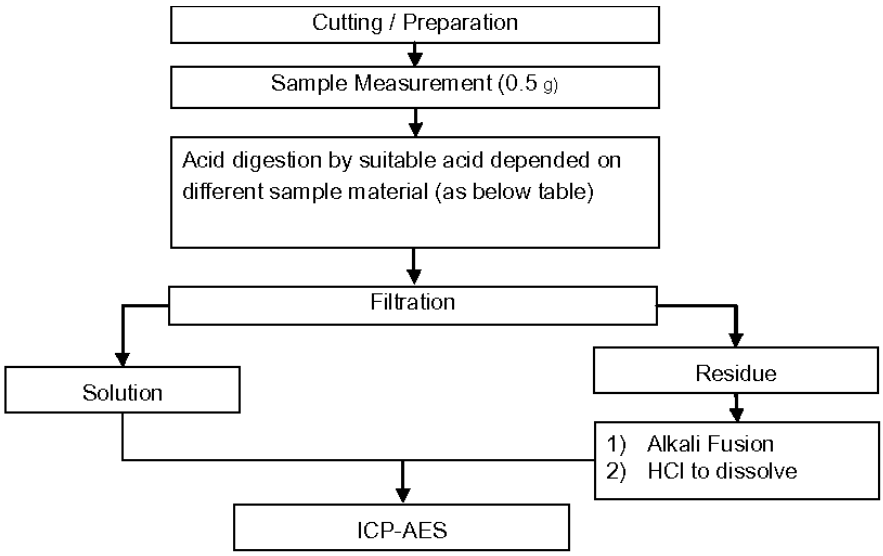
TEST PART DESCRIPTION:

NO.1 : WHITE PLASTIC PELLETS

Note : 1. mg/kg = ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. Sum of Mono to NonaBDE & according to 2005/717/EC DecaBDE is exempt.
5. "-" = Not Regulated

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Daniel Yeh

Method 1: Flow Chart of Digestion for Cd、Pb analysis



Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Any acid to total digestion

SHINKONG SYNTHETIC FIBERS CORPORATION

** End of Report **

測試報告

號碼 : CE/2007/31888　　日期 : 2007/03/12　　頁數 : 1 of 3

唐正企業有限公司
台北縣中和市中正路861巷11號

以下測試樣品係由客戶送樣，且由客戶聲稱並經客戶確認如下：

樣品名稱	:	空心圓針之黃銅材質表面鍍錫處理
樣品型號	:	ϕ0.6~12
收件日期	:	2007/3/6
測試期間	:	2007/3/6 TO 2007/03/12

==========

測試需求 : 參照 RoHS 2002/95/EC 及其修定指令要求.

測試方法 : 參考IEC 62321, Ed. 1 111/54/CDV方法檢測.

(1) 用感應藕合電漿原子發射光譜儀(ICP-AES)檢測鎘含量.
(2) 用感應藕合電漿原子發射光譜儀(ICP-AES)檢測鉛含量.
(3) 用感應藕合電漿原子發射光譜儀(ICP-AES)檢測汞含量.
(4) 針對金屬材質之樣品, 用Spot test / Colorimetric方法檢測六價鉻含量.

測試結果 : 請見下一頁.

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

測試報告

號碼 : CE/2007/31888　　日期 : 2007/03/12　　

唐正企業有限公司
台北縣中和市中正路861巷11號

測試結果（單位: mg/kg）

測試項目	測試方法（請參考）	結果		方法偵測極限值
		No.1	No.2	
鎘	(1)	3	---	2
鉛	(2)	95	---	2
汞	(3)	n.d.	---	2
六價鉻 (Spot test / boiling water extraction)	(4)	---	Negative	備註 5

測試部位描述:

NO.1　　:　銀色金屬
NO.2　　:　銀色金屬鍍層

備註：1. mg/kg = ppm
2. n.d. = Not Detected / 未檢出
3. MDL = Method Detection Limit / 方法偵測極限值
4. "---" = Not Conducted / 未測項目
5. Spot-test:
Negative=鍍層中偵測不到六價鉻, Positive=鍍層中偵測到六價鉻;
當該測項無法確認時, 測試樣品可藉由boiling-water-extraction測試方法進一步確認

Boiling-water-extraction:
Negative=鍍層中偵測不到六價鉻, Positive=鍍層中偵測到六價鉻;
該濃度溶液≧0.02 mg/kg with 50 cm^2 (sample surface area)

唐正企業有限公司
台北縣中和市中正路861巷11號

** 報告結尾 **