



承認書

APPROVAL SHEET

客戶名稱
CUSTOMER : 居易科技股份有限公司

品名
DESCRIPTION : 130型 2.4G SMA PLUG REVERSE 內緣鍍金

型號
PART NO. : 130SRP-A

客戶料號
PART NO. :

變更項目
CHANGE :

名晨(電子)股份有限公司		APPROVALED NO:
DOCU. NO:	R-AN2400-0303RS	客戶承認簽章 APPROVED SIGNATURES
出圖 Drawn By	Seagold	
業務 SALES	顏復威	
核准 Approved By	Grant	
日期 DATE:	2007/03/02	日期 DATE:

名晨(電子)股份有限公司
MY-CHANCE ELECTRONIC CO., LTD.
桃園縣蘆竹鄉龍安街二段 185 號
TEL:886-3-3699978 FAX:886-3-3608382

Product Number: 130SRP-A
Product Name: 2.4 GHz External Antenna

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- 1. Reliability Testing**
- 2. Specification**
- 3. S Parameter Test Data**
- 4. Antenna Radiation Pattern**
- 5. Mechanical Drawing**
- 6. MSDS & SGS Report**



1. Reliability Testing

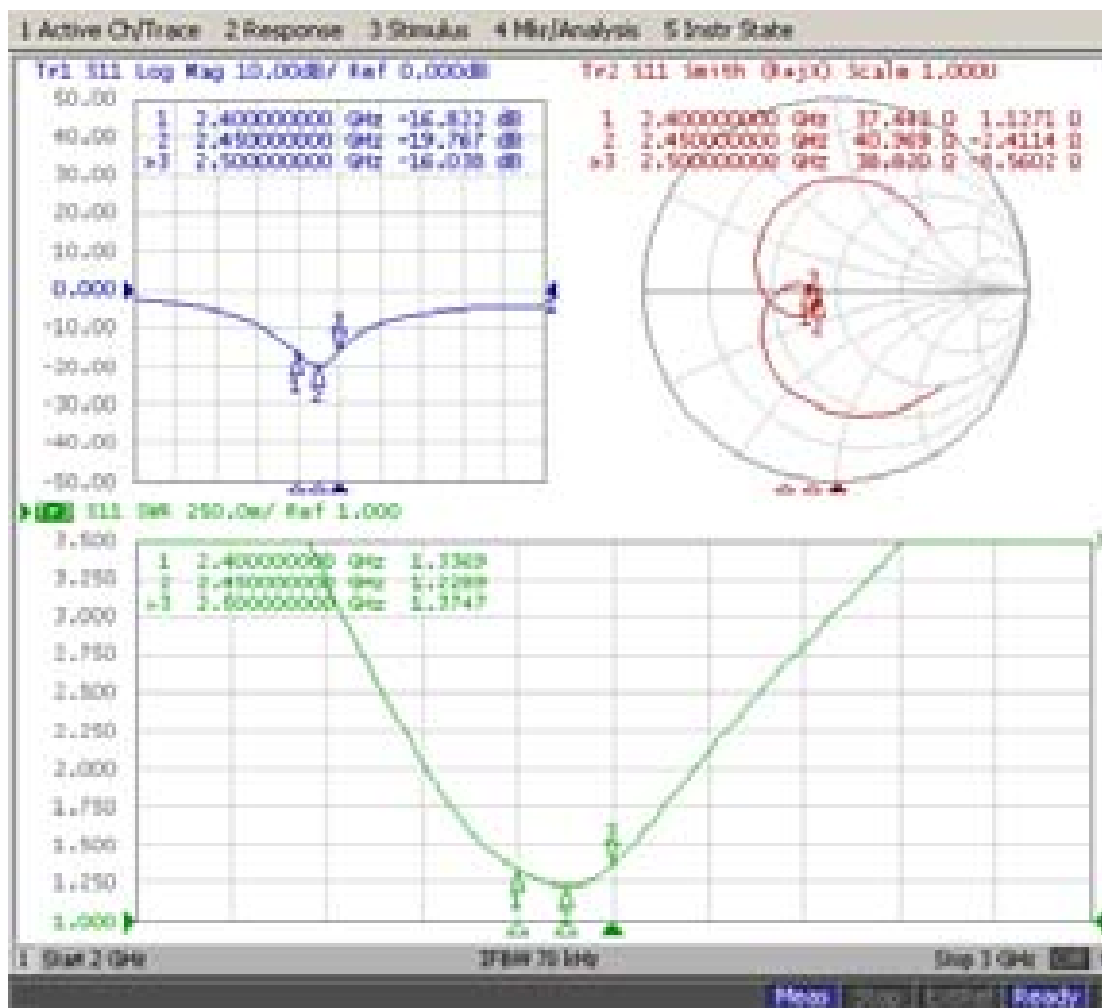
Test Item	Procedure	Requirement
1. Visual inspection and Dimension Check	Applicable methods using x5 magnification	follow specification
2. Rapid Changing of Temperature	-40°C (30minutes) to 90°C (30minutes); 120 cycles	After 2 hours recovery: 1. no visible damage 2. Freq. Tol.: < ±5%
3. Damp Heat	500 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. Freq. Tol. : < ±5%
4. Endurance	500 hours at 90°C	After 2 hours recovery: 1. no visible damage 2. Freq Tol.: < ±5%

Product Number: 130SRP-A
 Product Name: 2.4 GHz External Antenna

2. Specification

A. Electrical Characteristics	
S.W.R.	≤ 2.0 @ 2400~2500 MHz
Antenna Gain	2 ± 0.7 dBi (*Depends on Product Mechanical Environment*)
Impedance	50 Ohm
B. Material	
Material of Radiator	Cu (Plated)
Material of Connector	50 Ohm SMA Male Reverse
C. Environmental	
Operation Temperature	- 30 °C ~ + 85 °C
Storage Temperature	- 30 °C ~ + 85 °C

3. S Parameter Test data



Product Number: 130SRP-A
Product Name: 2.4 GHz External Antenna

4. Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

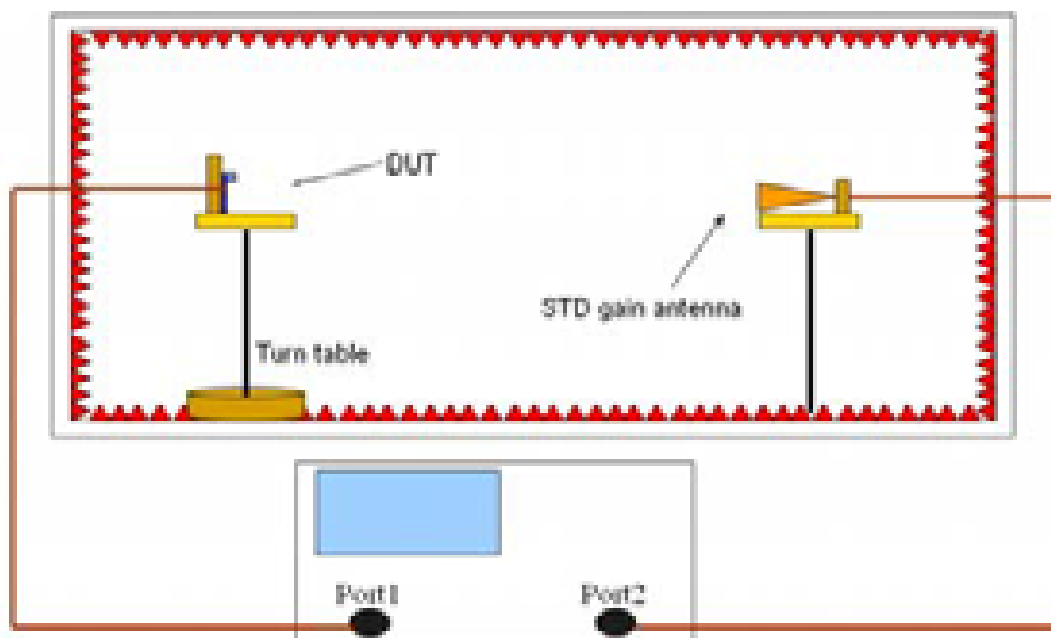
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna



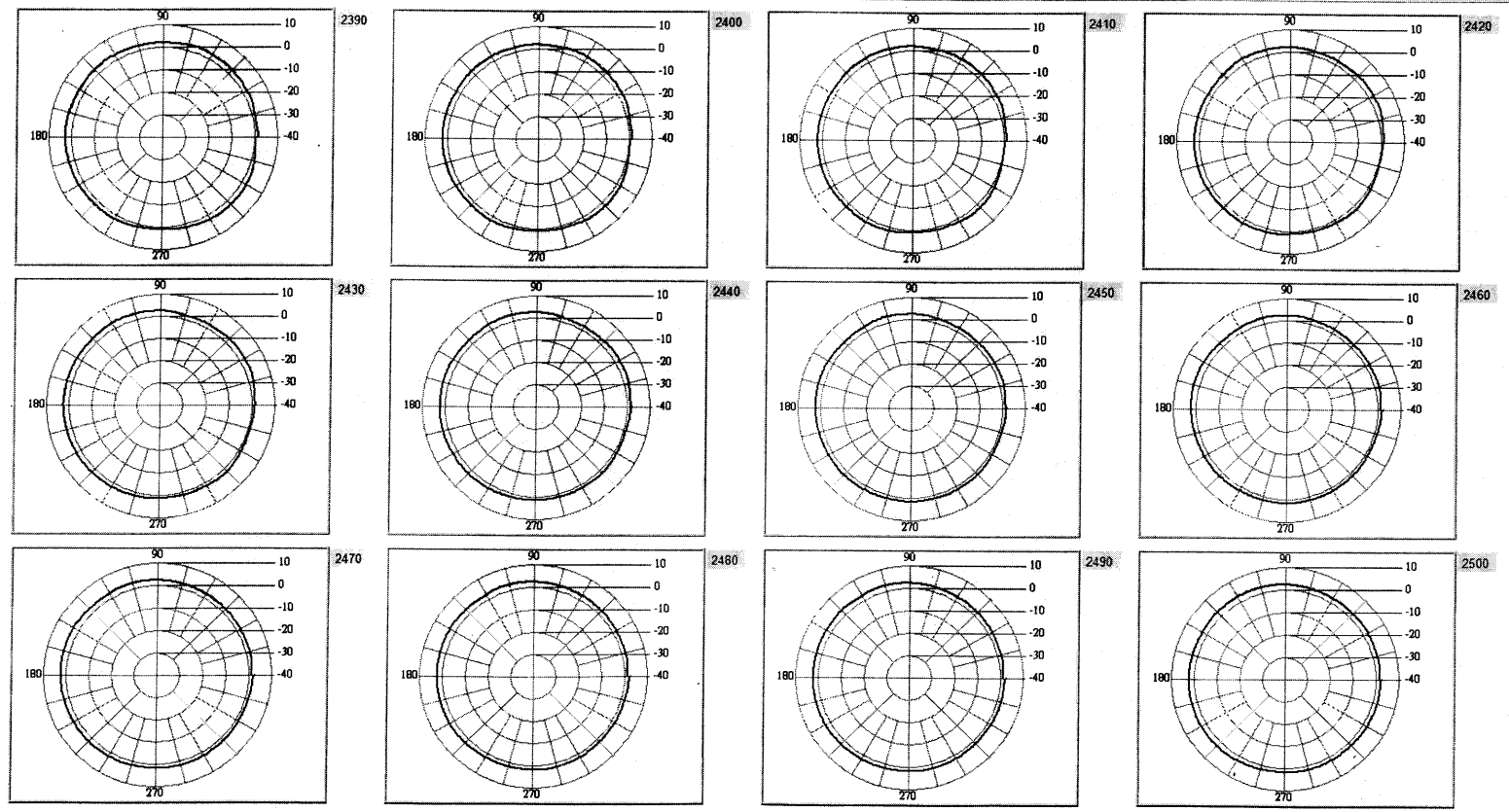
5. Mechanical Drawing

6. MSDS & SGS Report

Model
 Remark: H-Plane // Vertical Polarization
 Tested by: CORTEC Antenna 3D Lab // Chen Guo Qiang

Location: Chamber Date: 2007/2/23 Time: 下午 03:04:36
 Temperature (°C): 22.00 Humidity (%): 55.00 Approved by:

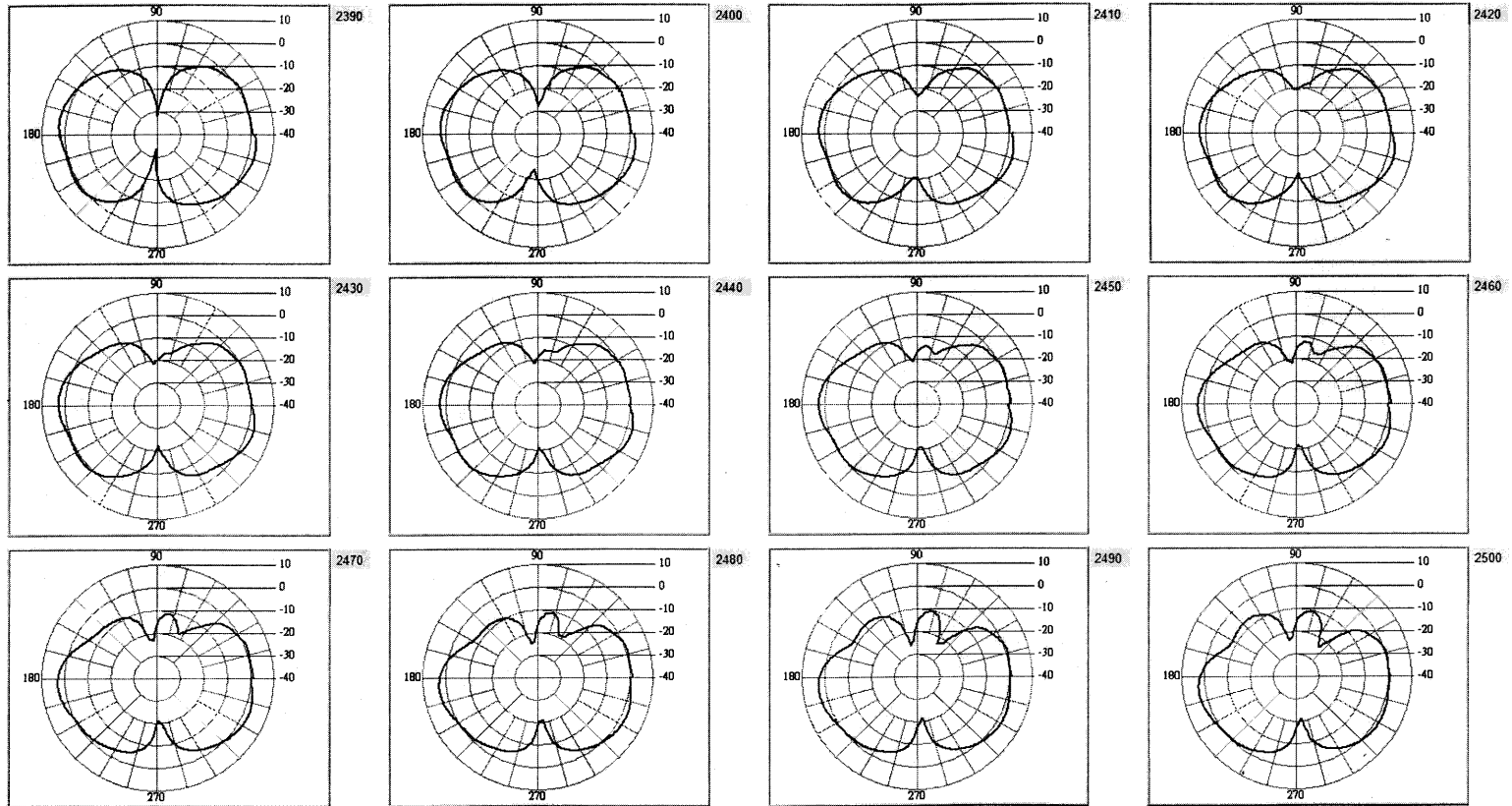
Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	2.67	2.46	2.46	2.66	2.83	2.82	2.76	2.64	2.65	2.65	2.6	2.67
Peak Degree	69	125	124	116	112	112	106	106	106	106	106	106
AV Gain (dBi)	1.99	1.79	1.66	1.76	1.9	1.89	1.85	1.81	1.95	2	2	2.09



Model:
 Remark: E-Plane // Horizontal Polarization
 Tested by: CORTEC Antenna 3D Lab // Chen Guo Qiang

Location: Chamber Date: 2007/2/23 Time: 下午 03:04:36
 Temperatur (°C): 22.00 Humidity (%): 55.00 Approved by:

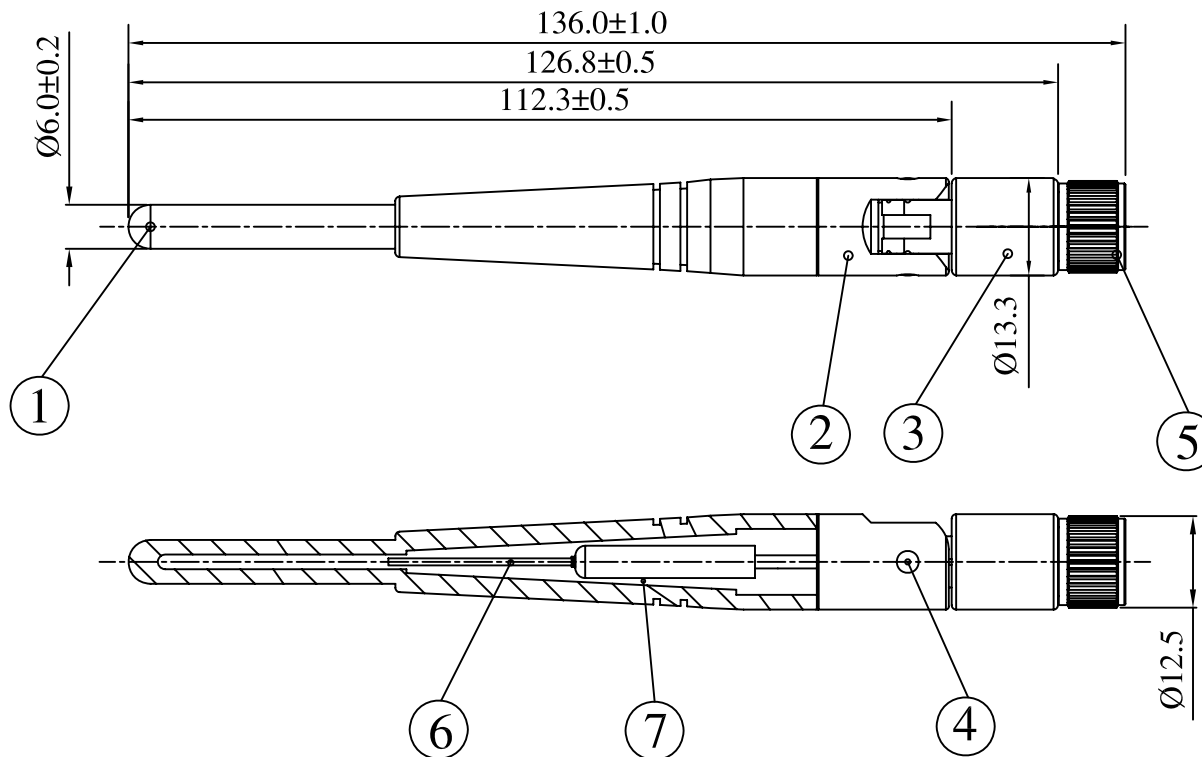
Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	2.87	2.94	2.99	3.03	2.86	2.55	2.5	2.74	2.93	2.96	2.93	2.77
Peak Degree	351	345	345	345	345	345	180	181	186	188	187	182
AV Gain (dBi)	-1.38	-1.48	-1.56	-1.59	-1.66	-1.9	-2	-1.97	-1.89	-1.97	-2.01	-2.18



RoHS

Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



7	R-AN4424517S	Cu	Cu	∅4.4*24.5mm	1
6	R-RG-178U	Coaxial cable	RG-178	L=85.0mm	1
5	R-SMA324-CC8MRANT	SMAMale Reverse	Cu	Eletrodeposition	1
4	R-AN03-514CZ	Rivet	Cu	Balck Zn Plated 120u"	2
3	R-AN03-T01	Base	PA-6	Black	1
2	R-AN03-T02	Hinge	PA-6	Black	1
1	R-AN03-T03	Body	TPE	Black	1
NO.	Part Number	Name	Material	Finished	Q'ty

PART NAME: Antenna 2.4GHz-2dBi			TITLE: Antenna 2.4GHz-2dBi		
PART NO.: R-AN2400-0303RS			DWG NAME: 130SRP-A		
APPROVED BY	CHECKED BY	DESIDNED BY		Tolerance	
Grant 2007/01/25	Liu Kui 2007/01/25	Seagold 2007/01/25		UNITS: mm	X.X ±0.5
				SCALE: 1/1	X.XX ±0.1
			REVISION: A	X° ±1°	

PA-6 Datasheet

納普工程塑料檢測報告單

QR-02401-04

A/1

NO : 00040401

品名	增切增強尼龍	檢驗標準	QW-024-03	顏色	黑色
型號	PA6-EA	批號	****	數量	2T
檢驗項目	單位	檢驗標準	標準要求	實測數據	
設計強度	Mpa	GB/T1040-92	****	35.6	
設計模量	Mpa	GB/T1040-92	****	1363	
斷裂伸長率	%	GB/T1040-92	****	63.6	
簡支梁沖擊強度(缺口)	KJ/M2	GB/T1043-93	****	20.0	
簡支梁沖擊強度(非缺口)	KJ/M2	GB/T1043-93	****	NB	
<p>結論:</p> <p>以上數據均為實測數據</p>					
檢驗員：李興華		日期：2008-05-07		審核：汪文	
				日期：2008-05-07	

TPE Datasheet

物性項目 Property	單位 Unit	ASTM 試驗法 Test Method	TPE
比重 Specific Gravity	---	D792	0.88
模具收縮率 Shrinkage	%	D955	0.8-2.5
斷裂拉伸強度 Tensile Strength	Kg/cm ²	D638	3.1
扭曲強度 Flexural Strength	Kg/cm ²	D790	---
衝擊強度缺口 23°C Impact Strength	Kg cm/cm	D256	---
硬度 Hardness	A Shore	---	13
熱變形溫度 0.45 MPa Heat Deflection Temp.	°C	D648	80
熔融指數 Melt Flow Index	G/min ²	D1238	10
燃燒性 Flammability	---	UL94	HB
<p>Testing Data from</p> <p>東莞市合春塑料有限公司 Tel:86-0769-2774772</p> <p>台灣大雅國際股份有限公司 Tel:886-02-27775232</p>			

TPE 物質安全資料表

一、成分辨識資料

物品名稱：THERMOPLASTIC ELASTOMER
同義名稱：THERMOPLASTIC ELASTOMER
化學文摘社登記號碼 (CNS NO.):
危害物質成分百分比 (%): --

二、危害辨識資料

最重要危害效應 無
* 健康危害效應： 無
* 環境影響： --
* 物理性及化學性危害： 本產品燃燒或受熱分解會釋出大量二氧化碳，其他有毒氣體和蒸汽。 避免點火源及粉塵產生，空氣與粉末之混合物有塵爆危險。
* 特殊危害： 無特別之危害
主要症狀： --
物品危害分類： 無

三、急救措施

不同暴露途徑之急救方法
• 吸入：將患者迅速移至新鮮空氣處。若停止呼吸立即施以人工呼吸，並立即就醫。
• 皮膚接觸：不需要，但接觸熔融產品時，立即浸泡於冷水中，不應該試圖把材料從皮膚移或者移走污染的衣服，如此容易撕傷接觸部位。
• 眼睛接觸：這個產品是惰性固體。如果在眼睛中，立刻以大量水緩和沖洗眼部，如仍感不適立即就醫。
• 食入：不需要。
最重要症狀及危害效應： --
對急救人員之防護：無
對醫師之提示： 無

四、滅火措施

適用滅火劑：水霧；二氧化碳；泡沫；乾粉滅火器 高壓水柱不適用於撲滅此類火災
滅火時可能遭遇之特殊危害：本產品燃燒或受熱分解會釋出大量二氧化碳，其他有毒氣體和蒸汽。
特殊滅火程序：受污染之消防用水儘量避免任其流入下水道、土壤或地表水，並已儲存設備用之儲存該受污染之消防用水，並依相關法令理處理遭受污染之土壤及消防水。
消防人員之特殊防護設備：消防人員需著全覆式防護衣，以及配帶自負式呼吸防護具。

五、洩漏處理方法

個人應注意事項： 嚴防點火源，並避免皮膚、眼睛及衣物之接觸。

環境應注意事項： 避免污染土壤，下水道及地表水。

清理方法： 原料處理完後將原儲存地區清洗乾淨，裝於適當容器中待後續處理。

六、安全處置與儲存方法

處置： 在廢棄處理時需遵守中央及地方政府的環保法令。

儲存： 1.原料儲存於儲槽或強化之塑膠袋中並避免潮濕、日光直射。

七、暴露預防措施

工程控制：確保工作區域之通風情況良好，並有局部排氣置。

應有適宜之量測設備做監視。

控 制 參 數

八小時時量平均 容許濃度 TWA	八小時時量平均 容許濃度 STEL	最高容許 濃度 CEILING	生物指標 BELS
未建立	未建立	未建立	未建立

個人防護設備：

- 呼吸防護： 須配帶適宜之口罩。
- 手部防護： 須戴防熱手套以避免手部直接接觸。
- 眼睛防護： 操作時應戴護目鏡或適當之臉部保護具。
- 皮膚及身體防護： 工作服必須為連身式，鞋樣須為密閉式以防止粉塵掉入。

衛生措施： 養成良好衛生習慣，工作場所勿飲食，飲食前先洗手。

八、物理及化學性質

物質狀態： 固體	形狀： 顆粒（外觀）
顏色： 不透明之米黃色顆粒	氣味： 無味
PH 值： --	沸點： 150°C ~ 220°C （溶點）
分解溫度： >250°C	閃火點： 300°C（測試方法：開杯）

自燃溫度： 300°C	爆炸密度： -- %
蒸氣壓： --	蒸氣密度： --
密度： 1.1 ~ 1.3g/cm ³ 於 25°C	溶解度： 不溶於水

九、安定性及反應性

安定性： 正常狀況下安定，熱分解 > 300°C

特殊狀況下可能之危害反應： --

應避免之狀況、物質：強氧化劑及加工中長期處於熔融狀態。

危害分解物：二氧化碳、一氧化碳和煙霧。

十、毒性資料

急毒性：吸入：蒸汽和灰塵可能會刺激眼睛和呼吸道。

皮膚：接觸受熱物質可能造成灼傷。

眼睛：眼睛接觸可能造成搔癢。

局部效應： --

致敏感性： --

慢毒性或長期毒性： --

特殊效應： --

十一、生態資料

可能之環境影響 / 環境流佈： 不會有擴大環境流佈現象。

十二、廢棄處置方法

廢棄處置方法：空的容器應透過一個適當地、合格得到許可的承包單位回收或者處置在廢棄處理時需遵守中央及地方政府的環保法令。

十三、運送資料

國際運送規定： 無約束。

聯合國編號： 無。

國內運送規定： 依道路交通安全規則。

特殊運送方法及注意事項： 無。

十四、法規資料

適用法規： 1. 道路交通安全規則。

2. 事業廢棄物儲存清除處理方法及設施標準。

Copper

Copper Datasheet

合金編號 Copper Alloy CN & JIS No.	化學成分 Composition (%)									
	銅 Cu	鉛 Pb	鐵 Fe	錫 Sn	鋅 Zn	鋁 Al	錳 Mn	鎳 Ni	磷 P	銅+鋁+錫 +錳+鎳 Cu+Al+Fe +Sn+Ni
C350	60.0-64.0	0.7-1.7	0.2以下 0.2max	Fe+Sn 0.4以下 0.4max	殘余 Rem					
C360	50.0-60.0	1.0-3.7	0.3以下 0.3max	Fe+Sn 0.5以下 0.5max	殘余 Rem					
C3602	30.0-60.0	1.0-3.7	0.5以下 0.5max	Fe+Sn 1.2以下 1.2max	殘余 Rem					
C3608	37.0-61.0	1.0-3.7	0.35以下 0.35max	Fe+Sn 0.6以下 0.6max	殘余 Rem					
C3604	37.0-61.0	1.0-3.7	0.4以下 0.5max	Fe+Sn 1.2以下 1.2max	殘余 Rem					
C3606	37.0-60.0	2.5-4.5	0.5以下 0.5max	Fe+Sn 1.2以下 1.2max	殘余 Rem					
C3712	38.0-62.0	0.20-1.2	Fe+Sn 0.8以下 0.8max		殘余 Rem					
C3711	37.0-61.0	1.0-2.5	Fe+Sn 1.0以下 1.0max		殘余 Rem					
合金種類 Alloy CN & JIS No.	符號 Symbol	名稱 Name	特性用途 Speciality and Usages							
C350	CU01	Nipple 用黃銅 Nipple Using Brass	切削性・冷間鍛造性良好 機械・摩托車・腳踏車用零件等 Excellent Cold Forging and Good Machine-ability Use Motorcycle and Bicycle Join Mat...							
C360	CU02	切削黃銅 Free Cutting Brass	切削性良好・C3601,C3602 切削性也良好・電腦・電子・釣具・鐘・ 儀器・錶殼・小螺絲・齒輪・凡用・摩托機各種五金零件 Excellent Machine-ability and C3601, C3602 Good Excellent to Use Computer, Electronic, Clock, Pen, Light and Fishing, Nut, Gear, Valve Chassis Parts, Hardware Parts...							
C3602	CU02									
C3604	CU02									
C3606	CU02									
C3608	CU02									
C3712	CU03	鍛造黃銅 Forging Brass	熱塑性良好・精造鍛造亦適合機械零件・ 熱間鍛造性和切削性均佳・凡用・表殼・機械零件等 Excellent Hot Forging Uses Precision Forging, Machine Parts, Excellent Hot Forging and Good Machine-ability . Using Valve, Watch, Machine Parts...							
C3711	CU03									

Coaxial Cable Datasheet

RG-178 Coaxial Cable Specification		
1. Cable Type	MIL – C – 17 / RG-178	
2. Impedance	50 ± 3 ohm	
3. Inner Conductor	Material	silver-coated copper
	Conductor Numbers	7
	Conductor Size	0.102 mm
	Outer Diameter	0.3 mm
4. Dielectric Layer	Material	FEP
	Color	Clear
	Average Thickness	0.28 mm
	Diameter	0.86 mm
5. Braid (Shielding)	Material	silver-coated copper
	Construction	16-3-0.1 mm
	Coverage	95 %
6. Outer Cover	Material	FEP
	Color	Brown
	Average Thickness	0.25 mm
	Diameter	1.80 ± 0.05 mm
7. V.S.W.R Testing	< 1.3 (DC ~ 6.0 GHz)	
8. Attenuation (dB / 100 meter)	100 MHz	46
	900 MHz	155
	1800 MHz	295
	2400 MHz	340
	5200 MHz	505
	6000 MHz	550
9. Capacitance	97 ± 3 (pF / meter)	
10. Maximum Power	30 dBm	
11. Spark Test	2.0 KV	
12. Rating Temp. and Volt.	200°C / 30V	
13. Conductor Resistance	335 ohm / KM / 20°C max.	
14. Dielectric Resistance	3 G ohm / KM / 20°C min.	



Survey Report

INVAX SYSTEM TECHNOLOGY CORP.
CORTEC TECHNOLOGY INC.

No : CS/2008/B0199

Date : 2008/11/23

Page : 1 of 9

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

Sample Description : COAXIAL SERIES
Style/Item No : COAXIAL SERIES
Testing Period : 2005/01/28 TO 2008/07/17

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

* This report is combined with 4 copies of test reports which hereby certified by SGS through the verification of each above certification provided by client.*


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



Survey Report

INMAX SYSTEM TECHNOLOGY CORP.
GDRTEC TECHNOLOGY INC.

No : CS/2005/80188
Date : 2006/11/23
Page : 2 of 8

Test Result(s)

PART NAME NO.1 : GRAY METAL(CE/2005/05123)
PART NAME NO.2 : IRON-GRAY METAL(CE/2006/46186)
PART NAME NO.3 : MIXED ALL PARTS(MULTILAYER FERRITE CHIP BEADS, MULTILAYER FERRITE CHIP INDUCTORS)(CE/2006/28763)
PART NAME NO.4 : MIXED ALL PARTS(MULTILAYER FERRITE CHIP BEADS, HIGH CURRENT FERRITE CHIP BEADS, BEAD ARRAY, MULTILAYER FERRITE COMMON MODE CHOKE)(CE/2006/23877)
PART NAME NO.5 : MIXED ALL PARTS(灰藍色阻容平貼類(2-3)及粉藍色阻容類)(CE/2006/67221)
PART NAME NO.6 : SILVER COLORED SOLDER(CE/2006/25828)
PART NAME NO.7 : MIXED ALL PARTS(C)(CE/2006/26941)
PART NAME NO.8 : MIXED ALL PARTS(TOSHIBA SEMICONDUCTOR)(CE/2006/88346A)
PART NAME NO.9 : MIXED ALL PARTS(BODY)(CE/2005/80638A NO.1)
PART NAME NO.10 : SILVER COLORED METAL PIN(CE/2005/80638A NO.2)
PART NAME NO.11 : BLACK EPOXY(CE/2005/91990B NO.3)
PART NAME NO.12 : SILVER COLORED METAL(CE/2006/20960A)
PART NAME NO.13 : MLCC(KA/2006/60498)
PART NAME NO.14 : THICK FILM CHIP RESISTORS & CHIP ARRAY(KA/2006/62605)
PART NAME NO.15 : SILVER COLORED METAL(CE/2006/31989A NO.1)
PART NAME NO.16 : SILVER COLORED PLATING(CE/2006/31989A NO.2)
PART NAME NO.17 : PET FILM (MYLAR)(KA/2005/80923A-01)
PART NAME NO.18 : MIXED ALL PARTS(SYLGARD 170 A & B SILICONE ELASTOMER)(CE/2006/87186)
PART NAME NO.19 : COPPER/SILVER COLORED METAL(CE/2005/A2640)
PART NAME NO.20 : BLACK PASTE(CE/2006/21870)
PART NAME NO.21 : TRANSPARENT LIQUID(CE/2006/21871)
PART NAME NO.22 : WHITE INK(CE/2005/A0062)
PART NAME NO.23 : GREEN PCB(SH6006519/CHEM)
PART NAME NO.24 : BLACK PELLETS(CE/2006/G2222)
PART NAME NO.25 : COPPER COLORED METAL SHEET(CS191 (PBP))(CE/2006/00709)
PART NAME NO.26 : YELLOW TAPE(CE/2005/15543)
PART NAME NO.27 : LT. YELLOW LIQUID(CE/2006/21863)
PART NAME NO.28 : GOLDEN COLORED METAL(SZR0607121195405C)(CTI)
PART NAME NO.29 : GREEN LIQUID(GZ06030305688/CHEM)
PART NAME NO.30 : WHITE PLASTIC BAR(SH6006096/CHEM)



Survey Report

INVAX SYSTEM TECHNOLOGY CORP.
CORTEC TECHNOLOGY INC.

No : CS0006/00169
Date : 2006/11/23
Page : 3 of 9

Test Item(s):	Unit	Method	MDL	Result					
				NO.1	NO.2	NO.3	NO.4	NO.5	
Monobromobiphenyl	ppm	With reference to USEPA3540C, Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	—	—	N.D.	—	N.D.	
Dibromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Tribromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Tetrabromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Pentabromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Hexabromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Heptabromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Octabromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Nonabromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Decabromobiphenyl	ppm		5	—	—	N.D.	—	N.D.	
Total PBBs	ppm		-	—	—	N.D.	—	N.D.	
Monobromobiphenyl ether	ppm		With reference to USEPA3540C, Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	—	—	N.D.	—	N.D.
Dibromobiphenyl ether	ppm			5	—	—	N.D.	—	N.D.
Tribromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Tetrabromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Pentabromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Hexabromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Heptabromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Octabromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Nonabromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Decabromobiphenyl ether	ppm	5		—	—	N.D.	—	N.D.	
Total PBBs(PBDEs)	ppm	-		—	—	N.D.	—	N.D.	
Total of Mono to Nona(Note 4)	ppm	-		—	—	N.D.	—	N.D.	

Test Item(s):	Unit	Method	MDL	Result				
				NO.1	NO.2	NO.3	NO.4	NO.5
Hexavalent Chromium (CrVI)	ppm	With reference to US EPA Method 3060A & 7196A for Hexavalent Chromium. Analysis was performed by UVM/6 Spectrometry.	2	N.D.	N.D.	N.D.	—	N.D.
Cadmium (Cd)	ppm	With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.	—	N.D.
Mercury (Hg)	ppm	With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.	—	N.D.
Lead (Pb)	ppm	With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.	2	N.D.	89.6	—	N.D.	N.D.

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Survey Report

INVAX SYSTEM TECHNOLOGY CORP.
CORTEC TECHNOLOGY INC.

No : CS0000/00100

Date : 2006/11/23

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Test Item(s):	Unit	Method	MDL	Result				
				NO.6	NO.7	NO.8	NO.9	NO.10
Monobromobiphenyl	ppm	With reference to USEPA3040C. Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	N.D.	N.D.	N.D.	N.D.	---
Dibromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Tribromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Tetrabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Pentabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Hexabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Heptabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Octabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Nonabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Decabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Total PBBs	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Monobromobiphenyl ether	ppm	With reference to USEPA3040C. Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	-	N.D.	N.D.	N.D.	N.D.	---
Obromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Tribromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Tetrabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Pentabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Hexabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Heptabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Octabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Nonabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Decabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Total PBBEs (PBDEs)	ppm		5	N.D.	N.D.	N.D.	N.D.	---
Total of Mono to Nona(Notes 4)	ppm	-	N.D.	N.D.	N.D.	N.D.	---	
		-	N.D.	N.D.	N.D.	N.D.	---	

Test Item(s):	Unit	Method	MDL	Result				
				NO.6	NO.7	NO.8	NO.9	NO.10
Hexavalent Chromium (CrVI)	ppm	With reference to US EPA Method 3060A & 7160A for Hexavalent Chromium. Analysis was performed by UV/Vis Spectrometry.	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)	ppm	With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.	N.D.	N.D.
Lead (Pb)	ppm	With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.	2	71.8	N.D.	11.0	---	24.8

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Survey Report

INVAX SYSTEM TECHNOLOGY CORP.
CORTEC TECHNOLOGY INC.

No : CS/2008/B0168

Date : 2008/1/23

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Test Item(s):	Unit	Method	MDL	Result					
				NO.11	NO.12	NO.13	NO.14	NO.15	
Monobromobiphenyl	ppm	With reference to USEPA3540C, Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/QAD/MS	5	—	N.D.	N.D.	N.D.	N.D.	
Dibromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Tribromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Nonabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Decabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Total PBBs	ppm		-	—	N.D.	N.D.	N.D.	N.D.	
Monobromobiphenyl ether	ppm		With reference to USEPA3540C, Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/QAD/MS	5	—	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl ether	ppm			5	—	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Nonabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Decabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Total PBDEs(PBDEs)	ppm	-		—	N.D.	N.D.	N.D.	N.D.	
Total of Mono to Nona(Noted)	ppm	-		—	N.D.	N.D.	N.D.	N.D.	

Test Item(s):	Unit	Method	MDL	Result				
				NO.11	NO.12	NO.13	NO.14	NO.15
Hexavalent Chromium (CrVI)	ppm	With reference to US EPA Method 3060A & 7198A for Hexavalent Chromium. Analysis was performed by UV/Vis Spectrometry.	2	—	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	With reference to ISO EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.	2	—	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)	ppm	With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.	2	—	N.D.	N.D.	N.D.	N.D.
Lead (Pb)	ppm	With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.	2	26.4	N.D.	N.D.	254.0	N.D.

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Survey Report

INVAX SYSTEM TECHNOLOGY CORP.
CORTEC TECHNOLOGY INC.

No : CS/2009/B0199

Date : 2009/11/23

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Test Item(s):	Unit	Method	MDL	Result					
				NO.16	NO.17	NO.18	NO.19	NO.20	
Monobromobiphenyl	ppm	With reference to USEPA3540C. Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	—	N.D.	N.D.	N.D.	N.D.	
Dibromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Trisbromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Nonabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Decabromobiphenyl	ppm		5	—	N.D.	N.D.	N.D.	N.D.	
Total PBBs	ppm		-	—	N.D.	N.D.	N.D.	N.D.	
Monobromobiphenyl ether	ppm		With reference to USEPA3540C. Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	—	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl ether	ppm			5	—	N.D.	N.D.	N.D.	N.D.
Trisbromobiphenyl ether	ppm			5	—	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Nonabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Decabromobiphenyl ether	ppm	5		—	N.D.	N.D.	N.D.	N.D.	
Total PBBEs/PBDEs	ppm	-		—	N.D.	N.D.	N.D.	N.D.	
Total of Mono to Nona(Note 4)	ppm	-		—	N.D.	N.D.	N.D.	N.D.	

Test Item(s):	Unit	Method	MDL	Result				
				NO.16	NO.17	NO.18	NO.19	NO.20
Hexavalent Chromium (CrVI)	ppm	With reference to US EPA Method 8050A & 7190A for Hexavalent Chromium. Analysis was performed by UV/vis Spectrometry.	2	—	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	With reference to BS EN 1123:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.	2	—	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)	ppm	With reference to US EPA Method 8052 for Mercury Content. Analysis was performed by ICP-AES.	2	—	N.D.	N.D.	N.D.	N.D.
Lead (Pb)	ppm	With reference to US EPA Method 8050B for Lead Content. Analysis was performed by ICP-AES.	2	—	N.D.	N.D.	21.5	N.D.
Hexavalent Chromium (CrVI)	**	With reference to IEC 63321, Ed.1 1115/4/00V. Analysis was performed by UV-VIS	0.02mg/kg with 50 cm ² surface area	negative	—	—	—	—

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Survey Report

INVAX SYSTEM TECHNOLOGY CORP.
CÓRTEC TECHNOLOGY INC.

No : C3/0008/80188
Date : 2008/1/23
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Test Item(s):	Unit	Method	MDL	Result				
				NO.21	NO.22	NO.23	NO.24	NO.25
Monobromobiphenyl	ppm	With reference to USEPA3340C, Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Total PBBs	ppm	-	N.D.	N.D.	N.D.	N.D.	N.D.	
Monobromobiphenyl ether	ppm	With reference to USEPA3540C, Analysis was performed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl ether	ppm		5	N.D.	N.D.	N.D.	N.D.	N.D.
Total PBBEs(PBDEs)	ppm	-	N.D.	N.D.	N.D.	N.D.	N.D.	
Total of Mono to Nona(Note 4)	ppm	-	N.D.	N.D.	N.D.	N.D.	N.D.	

Test Item(s):	Unit	Method	MDL	Result				
				NO.21	NO.22	NO.23	NO.24	NO.25
Hexavalent Chromium (CrVI)	ppm	With reference to US EPA Method 3060A & 7195A for Hexavalent Chromium. Analysis was performed by UV/Vis Spectrometry.	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)	ppm	With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.	N.D.	N.D.
Lead (Pb)	ppm	With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	37.0	N.D.	17.0

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Survey Report

NVAX SYSTEM TECHNOLOGY CORP.
CORTEC TECHNOLOGY INC.

No : CS/0008/80188

Date : 2009/1/23

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Test Item(s):	Unit	Method	MDL	Result				
				NO.26	NO.27	NO.28	NO.29	NO.30
Monobromobiphenyl	ppm	With reference to USEPA3340C, Analysis was performed by GC/MS and screening via USEPA 3350C with HPLC/DAD/MS	5	N.D.	N.D.	—	N.D.	N.D.
Dibromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Tribromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Tetrabromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Pentabromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Hexabromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Heptabromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Octabromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Nonabromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Decabromobiphenyl	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Total PBBs	ppm		-	N.D.	N.D.	—	N.D.	N.D.
Monobromobiphenyl ether	ppm	With reference to USEPA3340C, Analysis was performed by GC/MS and screening via USEPA 3350C with HPLC/DAD/MS	5	N.D.	N.D.	—	N.D.	N.D.
Dibromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Tribromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Tetrabromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Pentabromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Hexabromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Heptabromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Octabromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Nonabromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Decabromobiphenyl ether	ppm		5	N.D.	N.D.	—	N.D.	N.D.
Total PBBEs/PBDEs	ppm		-	N.D.	N.D.	—	N.D.	N.D.
Total of Mono to Nona(Items 4)	ppm	-	N.D.	N.D.	—	N.D.	N.D.	

Test Item(s):	Unit	Method	MDL	Result				
				NO.26	NO.27	NO.28	NO.29	NO.30
Hexavalent Chromium (CrVI)	ppm	With reference to US EPA Method 3060A & 7196A for Hexavalent Chromium. Analysis was performed by UVVis Spectrometry.	2	N.D.	N.D.	N.D.	—	N.D.
Cadmium (Cd)	ppm	With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	49.0	N.D.	N.D.
Mercury (Hg)	ppm	With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	N.D.	N.D.	N.D.
Lead (Pb)	ppm	With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.	2	N.D.	N.D.	—	N.D.	N.D.

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Survey Report

INVAX SYSTEM TECHNOLOGY CORP.
CORTEC TECHNOLOGY INC.

No : CS/0006/00199

Date : 2006/11/23

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Test Item(s):	Unit	Method	MDL	Result				
				NO.26	NO.27	NO.28	NO.29	NO.30
Lead (Pb)	ppm	With reference to US EPA Method 3052 for Lead Content. Analysis was performed by ICP-AES.	2	—	—	36700.0	—	—
Hexavalent Chromium (CrVI)	ppm	With reference to IEC 62321, Ed.1 111/54/GDV. Analysis was performed by UV-VIS	2	—	—	—	N.D.	—

Note : 1. mg/kg = ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. Sum of Mono to NonalDOE & according to 2005/717/EC DecaDOE is exempt.

5. 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 cm² sample surface area.

6. "—" = Not Conducted

7. "- " = Not Regulated

8. "" = Qualitative analysis (No Unit)

" End of Report "



Test Report

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4F, No.815, CHUNG HSAIO EAST RD. SEC.5,
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The following merchandise was (were) submitted and identified by the client as :

Type of Product : ANTENNA
Style/Item No. : EM SERIES; IM SERIES; NB SERIES; AN SERIES
Sample Received : 2004/01/05 & 2004/04/23 & 2004/06/11 & 2004/06/24 &
2004/12/09 & 2005/01/26 & 2005/02/17
Testing Date : 2004/01/05 TO 2004/01/06 & 2004/04/23 TO 2004/04/28 &
2004/06/11 TO 2004/06/21 & 2004/06/24 TO 2004/07/01 &
2004/12/09 TO 2004/12/16 & 2005/01/26 TO 2005/01/28 &
2005/02/17 TO 2005/03/03

Test Result : - Please see the next page -

*This report is combined with reports of SZTYR050102512/LP & CE/2004/62767 &
GZSCR040100230/LP & CE/2004/61520 & GZSCR040413274/LP & GZSCR050207531/LP*


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



Test Report

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Test Result

PART NAME NO.1 : BRASSY COLOR METAL BAR(SZTYR050102512/LP)
PART NAME NO.2 : BLACK PLASTIC SHEET(GZSCRO40100230/LP)
PART NAME NO.3 : TAN TRANSPARENT LIQUID(GZSCRO40413274/LP)
PART NAME NO.4 : BLACK PLASTIC JACKET(KHCX-32AWG-8B-TA)(CE/2004/61520)
PART NAME NO.5 : TRANSPARENT PEP JACKET(CE/2004/C1640)
PART NAME NO.6 : WHITE PALSTIC(CE/2004/62767)
PART NAME NO.7 : SILVER COLORED METAL WIRE(GZSCRO50207531/LP NO. 1)
PART NAME NO.8 : TRANSPARENT LT. BROWN PLASTIC(GZSCRO50207531/LP NO. 2)

Test Item (s)	Unit	Method	MDL	Result				
				No.1	No.2	No.3	No.4	No.5
PBBs(Polybrominated biphenyls)(CAS NO:059536-65-1)	%	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.	N.D.
PBDEs(PBDEs)(Polybrominated biphenyl ethers)	%	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.	N.D.



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Test Item (s):	Unit	Method	MDL	Result				
				No.1	No.2	No.3	No.4	No.5
Chromium VI (Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A.	2	N.D.	---	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	ICP-AES after as per EN 1122, method B:2001 or other acid digestion.	2	22.0	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	2	N.D.	---	N.D.	N.D.	N.D.
Lead (Pb)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	24600.0	6.0	N.D.	N.D.	N.D.

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
PBBs(Polybrominated biphenyls)(CAS NO:039536-65-1)	%	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.	---	N.D.
PBBEs(PBDEs)(Polybrominated biphenyl ethers)	%	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.	---	N.D.

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Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
Chromium VI (Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A.	2	---	N.D.	N.D.
Cadmium (Cd)	ppm	ICP-AES after as per EN 1122, method B:2001 or other acid digestion.	2	N.D.	N.D.	---
Mercury (Hg)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	2	---	N.D.	---
Lead (Pb)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	2	N.D.	N.D.	---
Cadmium (Cd)	ppm	ICP-AES after as per EN 1122, method B:2001 or other acid digestion.	15	---	---	N.D.
Mercury (Hg)	ppm	ICP-AES after as per US EPA 3052 or other acid digestion.	50	---	---	N.D.
Lead (Pb)	ppm	ICP-AES after as per US EPA 3050B or other acid digestion.	15	---	---	N.D.

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
AZO		As per LMBG 8202-2				
4-AMINODIPHENYL (CAS NO.92-67-1)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
BENZIDINE (CAS NO.92-87-5)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
4-CHLORO-O-TOLUIDINE (CAS NO.95-69-2)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
2-NAPHTHYLAMINE (CAS NO.91-59-8)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
O-AMINOAZOTOLUENE (CAS NO.97-56-3)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.



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Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
2-AMINO-4-NITROTOLUENE (CAS	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
P-CHLOROANILINE (CAS NO.106-47-8)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
2,4-DIAMINOANISOLE (CAS NO.615-05-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
4,4-DIAMINODIPHENYLMETHANE (CAS NO.101-77-9)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
3,3-DICHLOROBENZIDINE (CAS NO.91-94-1)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
3,3-DIMETHOXYBENZIDINE (CAS NO.119-90-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
3,3-DIMETHYLBENZIDINE (CAS NO.119-93-7)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
3,3-DIMETHYL-4,4-DIAMINODIPHENYLMETHANE (CAS NO.838-88-0)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
P-CRESIDINE(2-METHOXY-5-METHYLANILINE) (CAS NO.120-71-8)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
4,4-METHYLENE-BIS-(2-CHLORANILINE) (CAS NO.101-14-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
4,4-OXYDIANILINE (CAS NO.101-80-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
4,4-THIODIANILINE (CAS NO.139-65-1)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
O-TOLUIDINE (CAS NO.95-53-4)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.



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Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
2,4-TOLUYLENDIAMINE (CAS NO.95-80-7)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
2,4,5-TRIMETHYLANILINE (CAS NO.137-17-7)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
O-ANISIDINE (CAS NO.90-04-0)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.
P-AMINOAZOBENZENE (CAS NO.60-09-3)	ppm	Analysis was performed by GC/MS.	3	N.D.	---	N.D.

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
Mirex(CAS NO:002385-85-9)	ppm	Analysis was performed by GC/MS.	4	N.D.	---	---

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
PCBs(Polychlorinated Biphenyls)(CAS NO:001336-36-3)	ppm	With reference to USEPA 8082A. Analysis was performed by GC/ECD/MS.	0.5	N.D.	---	---

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
Organic-tin compounds						
Triphenyl Tin(TPI)(CAS NO:000668-34-8)	ppm	With reference to 83/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	---	---	N.D.
Tributyl Tin(TBT)	ppm	With reference to 83/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	---	---	N.D.



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Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
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.6	No.7	No.8
PCBs(Polychlorinated Biphenyls)(CAS NO.001336-36-3)	ppm	With reference to USEPA 8082A. Analysis was performed by GC/ECD/MS.	0.5	---	---	N.D.

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
Polychlorinated Naphthalene	ppm	With reference to USEPA 8081B. Analysis was performed by GC/MS.	5	---	---	N.D.



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Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
PVC (CAS No.9002-86-2)	**	Analysis was performed by FTIR/ATR and Pyro-GC/MS.	-	---	---	N.D.

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
Chlorinated Paraffin (C10-C13) (CAS NO.010871-26-2)	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by GC/MS or GC/ECD.	0.01	---	---	N.D.

Test Item (s):	Unit	Method	MDL	Result		
				No.6	No.7	No.8
Formaldehyde(CAS No.000050-00-0)	ppm	With reference to DIN 53315 & USEPA 8315A method. Analysis was performed by HPLC/DAD/MS	0.2	---	---	N.D.

- NOTE: (1) N.D. = Not detected (<MDL)
 (2) ppm = mg/kg
 (3) MDL = Method Detection Limit
 (4) " --- " = Not Applicable
 (5) " - " = No Regulation
 (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