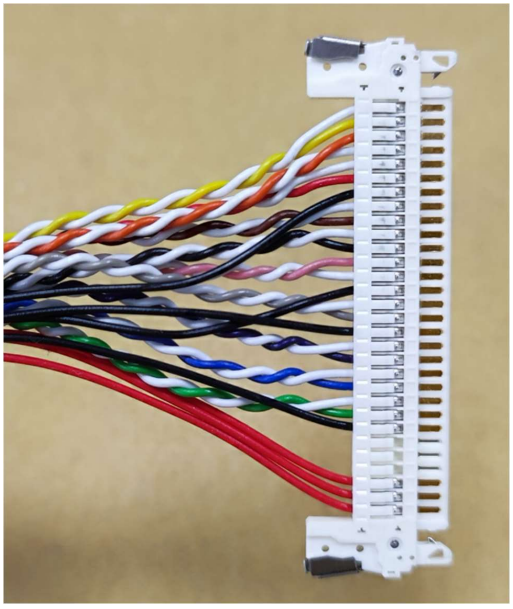
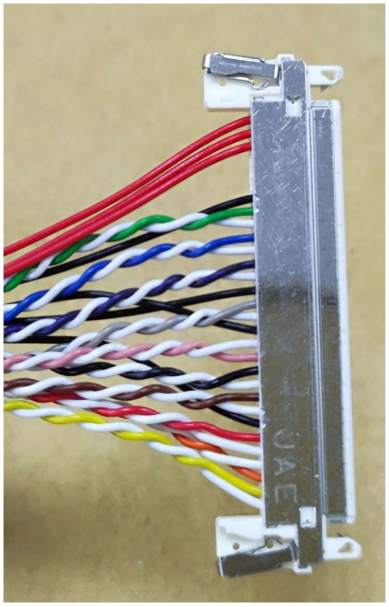
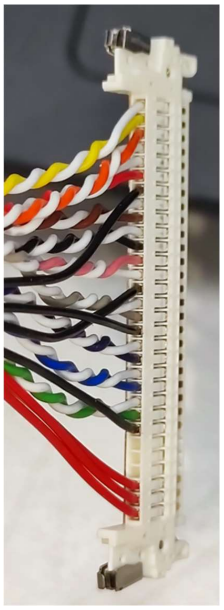


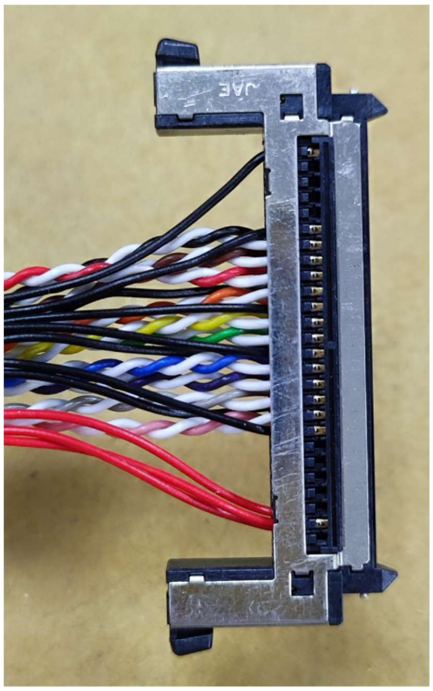
設計驗證
工程課
2024.03.06
發行
[illegible]科技開發股份有限公司

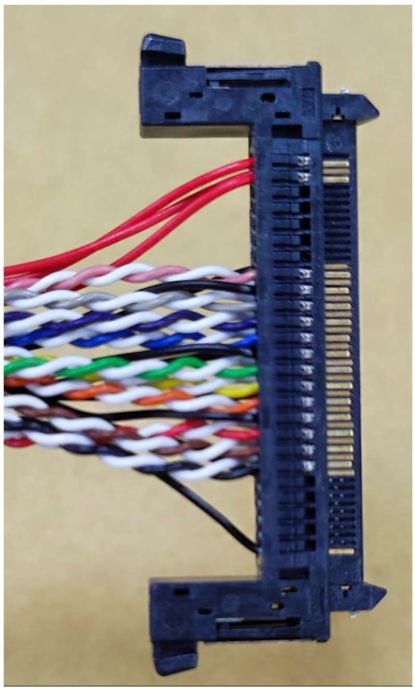


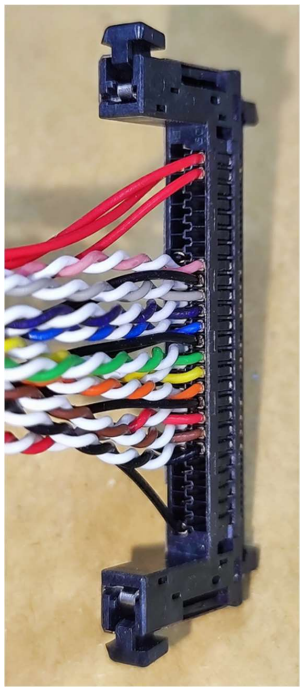


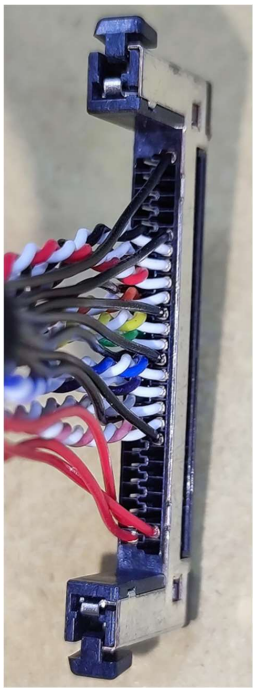












承　認　書

客戶名稱	鈺 緯 科 技	品名規格	
客戶料號	3KH00265010(K1172)	稳德料号	
使用機型		成品單重	
認可日期	2024年01月19日	材料種類	

客戶簽認		
設計驗證 工程課 2024.03.06 發行 鈺緯科技開發股份有限公司		
核　准	核對	經辦

廠商簽認		
核　准	核 對	經 辦
	陳熙偉	曾貴梅

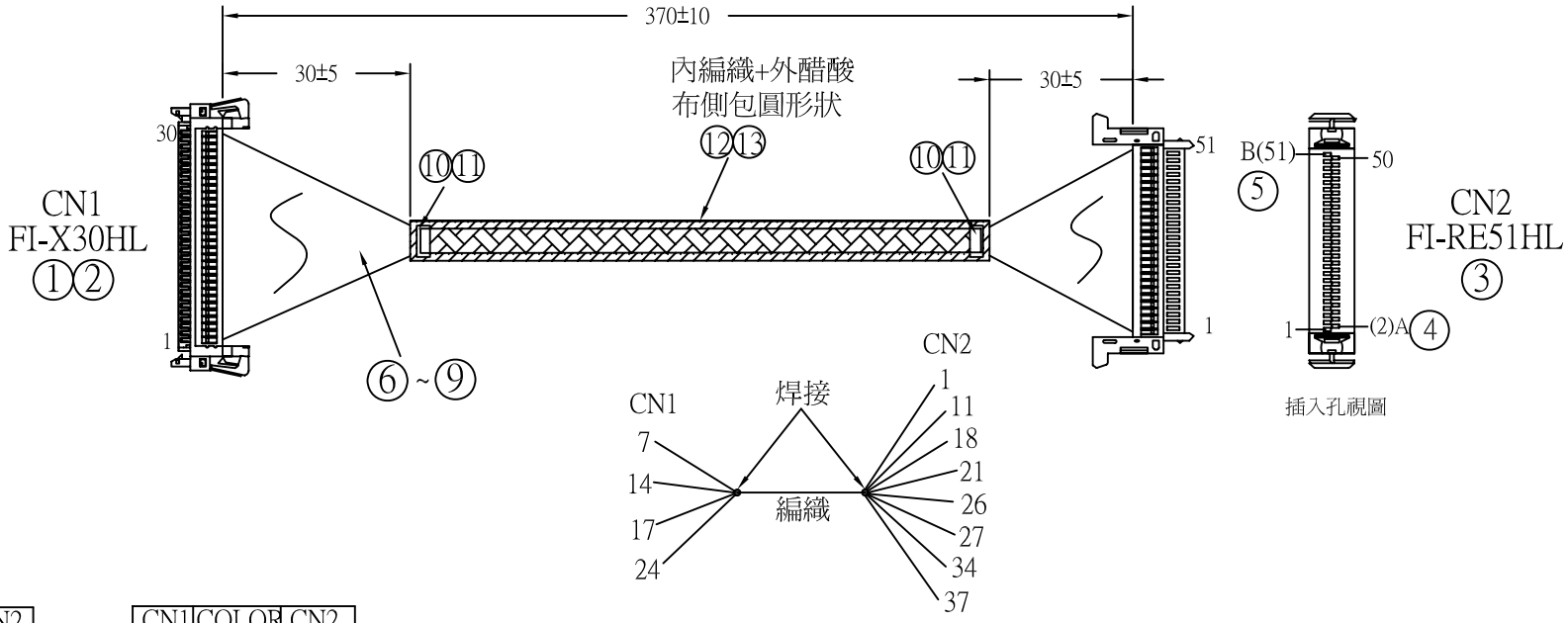
东莞穩德電子有限公司

地址：廣東省東莞市虎門鎮新聯高科技工業區

TEL:(0769)85509740　　FAX:(0769)85504618

http://www.wentek.com.tw　　E-mail:sales@dgwender.com.cn

DRAWING:
(成品圖)



	CN1	COLOR	CN2
對絞	1	白	23
	2	黃	22
對絞	3	橙	20
	4	白	19
對絞	5	白	17
	6	紅	16
	7	黑+編織	1
對絞	8	白	15
	9	棕	14
對絞	10	白	13
	11	黑	12
對絞	12	粉	36
	13	白	35
	14	黑+編織	11
對絞	15	白	33
	16	灰	32

	CN1	COLOR	CN2
	17	黑+編織	18
對絞	18	白	31
	19	紫	30
對絞	20	白	29
	21	藍	28
對絞	22	白	25
	23	綠	24
	24	黑+編織	21
	25-27	X	
	28	紅	48
	29	紅	49
	30	紅	50
		黑+編織	26
		黑+編織	27
		黑+編織	34
		黑+編織	37

備註：

1、裁線長度：1.5 x 380 x 1.5
1.5 x 403 x 1.5(絞線)
1.5 x 45 x 4.0(跳線)

2、測試條件:
>測試電壓:300 V.DC.
>導通阻抗:2Ω(MAX).
>絕緣阻抗:20MΩ(MIN).

Note:
包裝內袋 or 外箱貼 UL Lable

WIRING HARNESS
ISSUE NO.XXXXXX
FORM N XXX PCS

設計驗證
工程課
2024.03.06
發行
鈺緯科技開發股份有限公司

NO. 項次	Description 規格說明	Unit 單位	Q"TY 單用量	Remark 備注
13	黑色醋酸布:W=35 L=310	PCS	1	百園
12	編織網：0.12/168C L=300	PCS	1	吉泓
11	黑色熱縮套管：ϕ3 x 10	PCS	2	領飛
10	黃色嗖拉：W=10	M	0.08	展宏
9	UL1571#28 OD:0.6 黑 L=45	PCS	12	眾達
8	UL1571#28 OD:0.6 紅 L=380	PCS	3	眾達
7	UL1571#28 OD:0.6 黑棕紅橙黃綠藍紫灰粉 L=403	PCS	各1	眾達
6	UL1571#28 OD:0.6 白 L=403	PCS	10	眾達
5	TER:FI-RC3-1B-1E-15000	PCS	16	JAE
4	TER:FI-RC3-1A-1E-15000	PCS	15	JAE
3	HSG:FI-RE51HL	PCS	1	JAE
2	TER:FI-XC3B-1-15000	PCS	27	JAE
1	HSG:FI-X30HL	PCS	1	JAE

No. 項次	Date 日期	Design Change Record 變更記錄	Confirm 確認

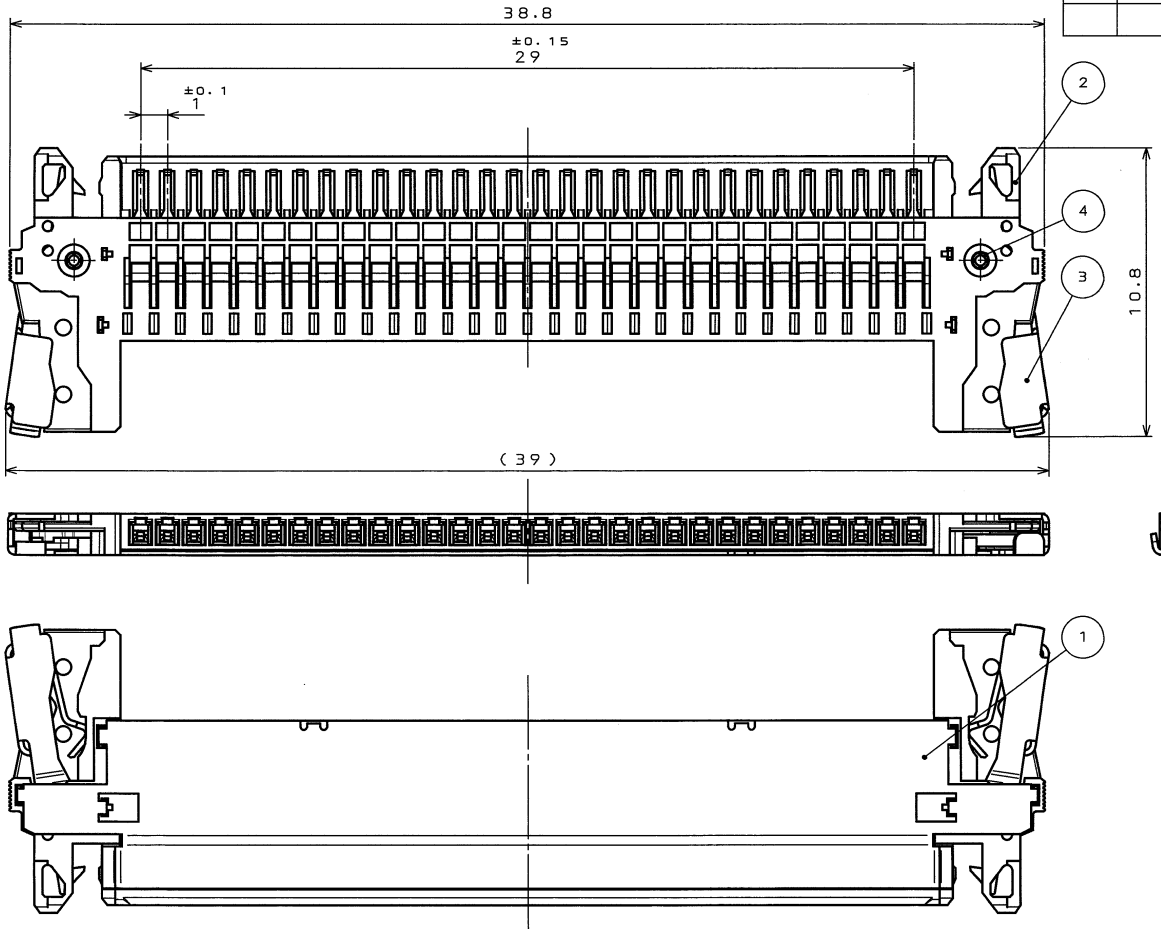
Approval 檢查規范			
Approve 核准	Check 复核	Confirm 確認	Draw By 繪圖

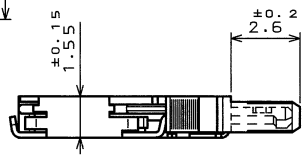
ISSUE NO. 版次	REV. A	Customer 客戶名稱	鈺緯科技
	Unit : mm 單位	Drawing No. 品名	(K1172)
A	Scale : 比例	PART NO. 料號	3KH00265010
	2023.11.09	DRAW NO. 繪圖編號	231109001

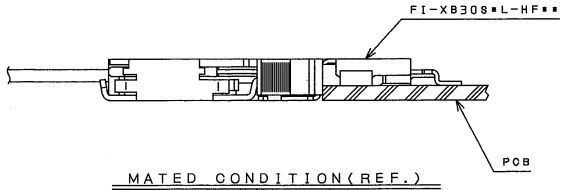
WEN DE ELECTRONICS CO.,LTD.

版数 REV.	年月日 DATE	DCN NO.	変更内容 DESCRIPTION	製図 DR.	担当 CHK.	査閲 APPD.	承認 APPD.
2	6.May.2003	52052	AN ERROR IN WRITING CORRECTION	T.YAMAJI	K.HISAMATU	A.Kimura	Y.Ichiyama

図面番号(DRAWING NO.) SJ037012







MATED CONDITION(REF.)
嵌合状態図(参考)

NOTE1.Refer to Instruction manual JAHL-1597-20.
注1.取扱説明書JAHL-1597-20を参照してください。

NOTE2.APPLICABLE CONTACT
FI-XC3-1-15000(SJ033911)or FI-XC3-B-1-15000(SJ036918)

注2.適合コンタクトは下記コンタクトを使用して下さい。
FI-XC3-1-15000(SJ033911)又は FI-XC3-B-1-15000(SJ036918)

符号 NO.	名称 DESCRIPTION	個数 QTY.	材料 MATERIAL	仕上 FINISH	備考 REMARKS
4	PIVOT	2	STAINLESS STEEL	――	――
3	LOCK LEVER	2	STAINLESS STEEL	――	
2	INSULATOR	1	HEAT RESISTING PLASTIC	――	UL94 V-0 BEIGE △2
1	GROUND PLATE	1	COPPER ALLOY	TIN PLATING	――

仕様書(SPECIFICATION)
JACS-1597-20
JAHL-1597-20

一般公差(GENERAL TOLERANCE)

寸法(DIMENSION)	角度(ANGLES)
. ±0.8	X° ±
.X ±0.4	X°X' ±
.XX ±0.1	
.XXX ±	

第1版(ORIGINAL DATE) 4.Sep.2002

製図 DR.	
担当 CHK.	K.HISAMATSU
査閲 APPD.	A.KIMURA
承認 APPD.	Y.ICHIYAMA

尺度(SCALE) 5:1 シリーズ(SERIES) FI-X

名称(TITLE) FI-X30HL (HOUSING)

重量(WEIGHT)

日本航空電子工業株式会社
JAPAN AVIATION ELECTRONICS INDUSTRY, LTD.

図面番号(DRAWING NO.) SJ037012

SIZE A3

版数(REV.) 2

CDS-02-180-10246

DOF-0-212D(98.02)

JAE-CONNECTOR.COM
Reference Only

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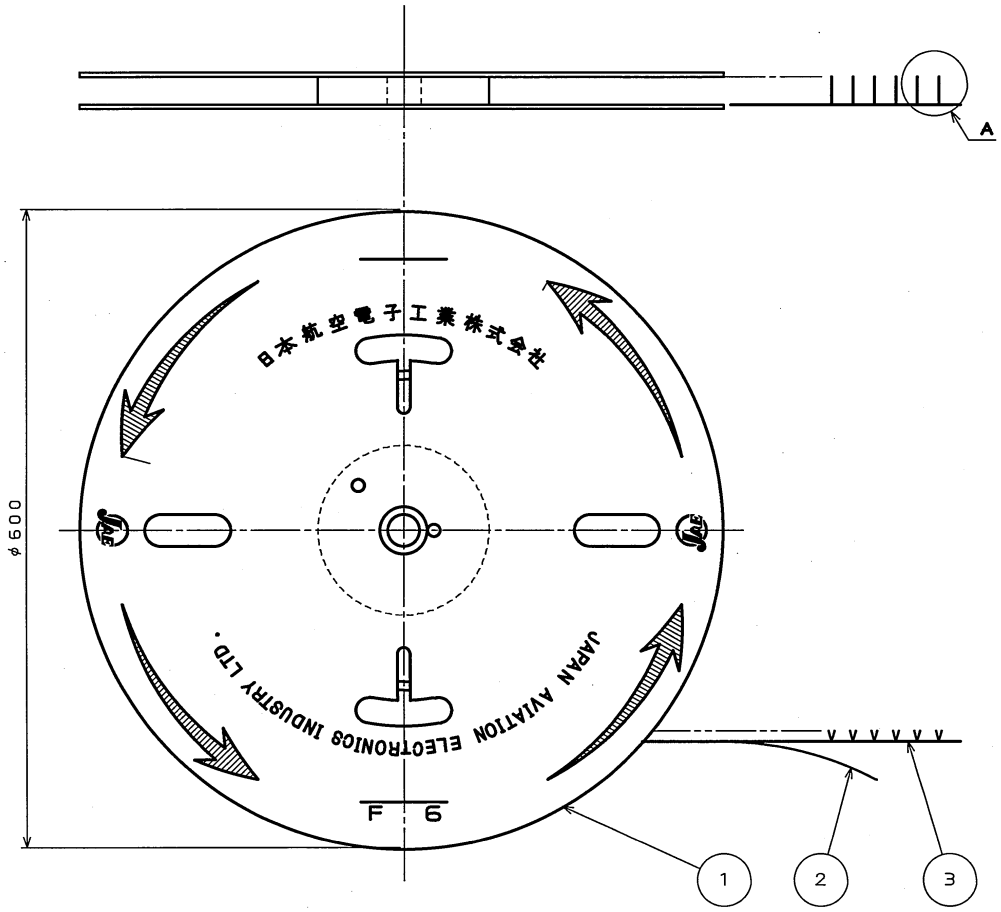
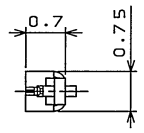
図面番号(DRAWING NO.) SJ106017

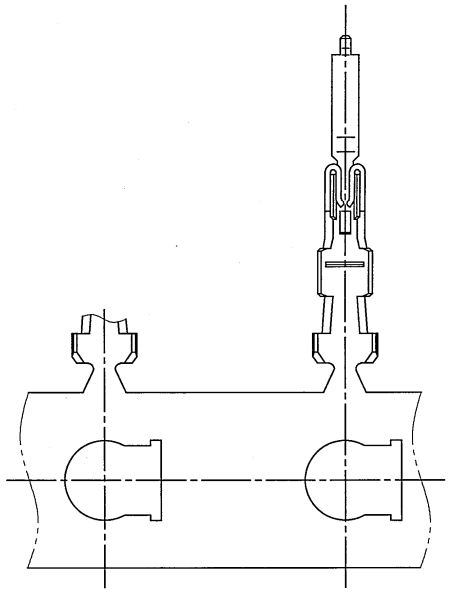
版数 REV.	年月日 DATE	DCN NO.	変更内容 DESCRIPTION	製図 DR.	担当 CHK.	査閲 APPD.	承認 APPD.
2	28.Feb.2007	062419	ADD GENERAL TOLERANCE	M.SUZUKI	T.SHIODA	M.SUZUKI	K.Hisatomi



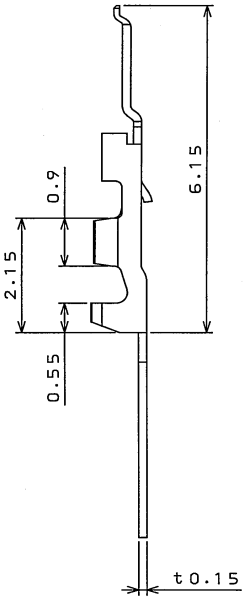


EXCLUDING CRIMP POT

クリンプポット部は除く



DETAIL A
(SCALE 10:1)



NOTE1. APPLICABLE WIRE: #30～#36 AWG. STANDERD.
2. INSULATION OUTER DIA. φ0.45～φ0.75mm
3. USE THE APPLICATOR MADE BY JAE.

注1．使用電線は，AWG#30～#36の撚線とする．
2．被覆外径はφ0.45～0.75mmとする．
3．アプリケータはＪＡＥオリジナルを使用とする．

符号 NO.	名称 DESCRIPTION	個数 QTY.	材料 MATERIAL	仕上 FINISH	備考 REMARKS
3	CONTACT	15000	COPPER ALLOY	MATING AREA : GOLD(0.1μm MIN) OVER NICKEL	CRIMP AREA:TIN PLATING
2	PAPER TAPE	1	PAPER	———	———
1	MAGAZINE	1	PAPER	———	———

仕様書(SPECIFICATION) JACS-1597-507

第1版(ORIGINAL DATE) 10.Dec.2005

製図 DR.	M.SUZUKI
担当 CHK.	T.SHIODA
査閲 APPD.	M.SUZUKI
承認 APPD.	K.HISATOMI

一般公差(GENERAL TOLERANCE)

寸法(DIMENSION)	角度(ANGLES)
. ±0.8	X° ±
.X ±0.4	X°X'±
.XX ±0.1	
.XXX±	

尺度(SCALE) ——— シリーズ(SERIES) FI-X

名称(TITLE) FI-XC3A-1-15000 MAGAZINE ASSEMBLY

質量(MASS)

日本航空電子工業株式会社 JAPAN AVIATION ELECTRONICS INDUSTRY, LTD.

図面番号(DRAWING NO.) SJ106017

SIZE A3

版数(REV.) 2

JAE-CONNECTOR.COM Reference Only

DOF-0-212F(05.08)

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品 名 構 成　圧着ﾊｳｼﾞﾝｸﾞﾒｶﾆｶﾙﾛｯｸ及びShellﾀｲﾌﾟ 単品 (SJ103279)

命名法

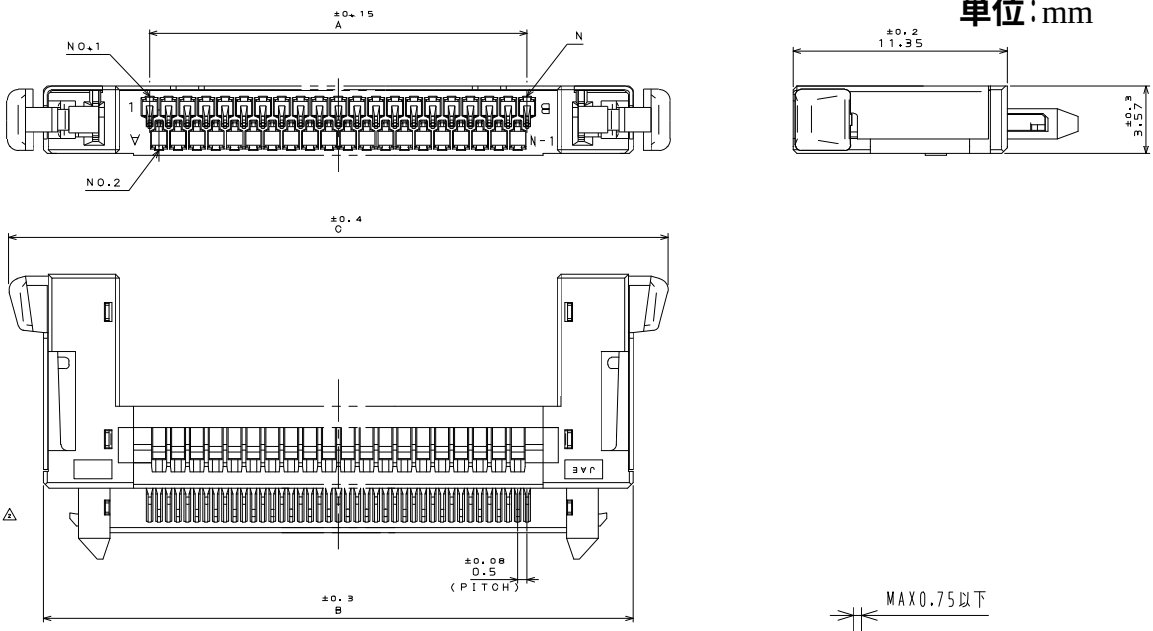
FI-R　E　**　H　L

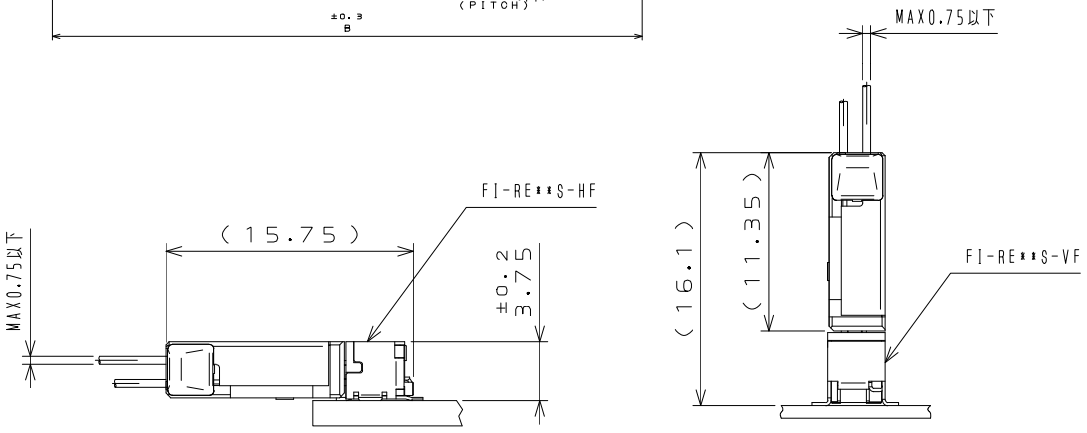
- FI-R：ｼﾘｰｽﾞ名
- E：ｼｪﾙﾀｲﾌﾟ
- **：極数：21,31,41,51芯
- H：ｹｰﾌﾞﾙ側圧着ﾀｲﾌﾟ
- L　：ﾒｶﾆｶﾙﾛｯｸあり



B1

単位：mm





嵌合状態図 (参考)

寸法表

NO.OF CONTACTS(N) \ DEMENSION	A	B	C
21	10	21.25	24.95
31	15	26.25	29.95
41	20	31.25	34.95
51	25	36.25	39.95

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品 名 構 成

圧着ﾊｳｼﾞﾝｸﾞ用上段ｺﾝﾀｸﾄ(SJ103060)

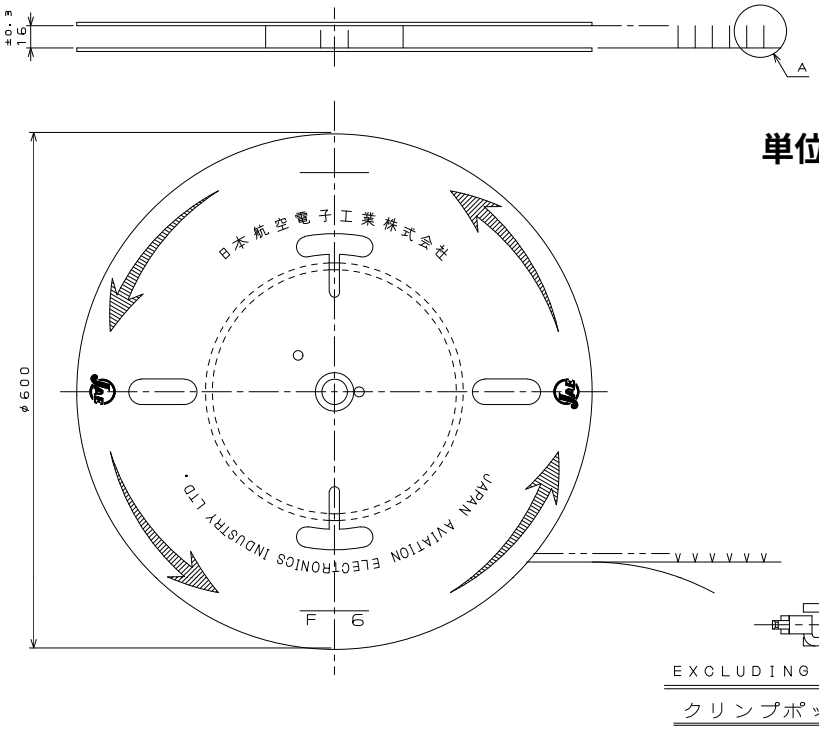


命名法

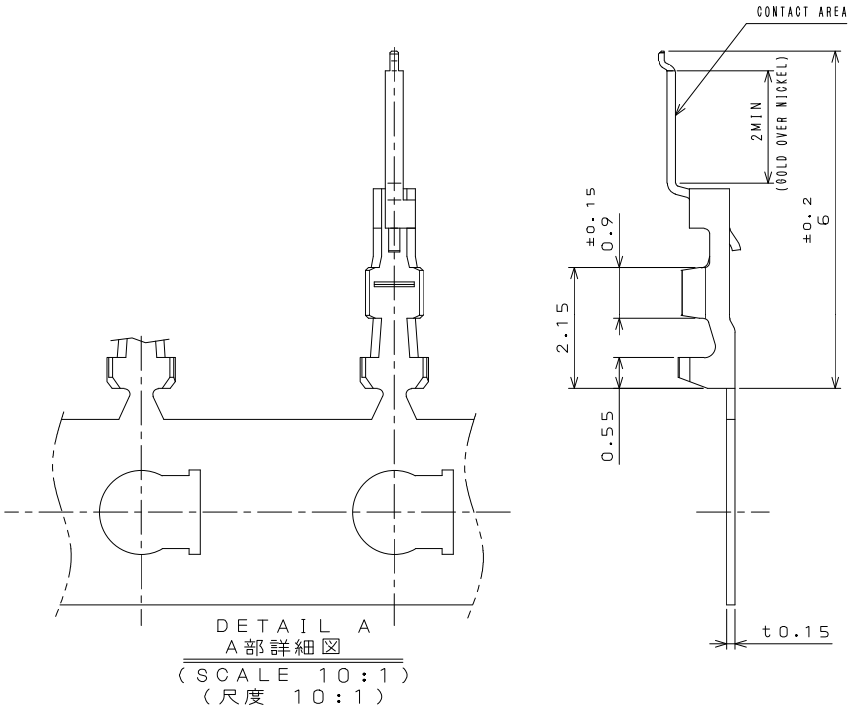
FI-R C3 – 1A – 1E – 15000

- FI-R：ｼﾘｰｽﾞ名
- C3：圧着ﾊｳｼﾞﾝｸﾞ用ｺﾝﾀｸﾄ
- 1A：上段ｺﾝﾀｸﾄ
- 1E：ﾓﾃﾞｨﾌｨｹｰｼｮﾝｺｰﾄﾞ
- 15000：ﾏｶﾞｼﾞﾝｱｾﾝﾌﾞﾘ15000本/ﾘｰﾙ

B2



単位：mm



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品 名 構 成

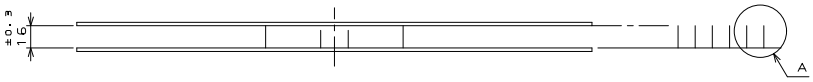
圧着ﾊｳｼﾞﾝｸﾞ用下段ｺﾝﾀｸﾄ(SJ103061)



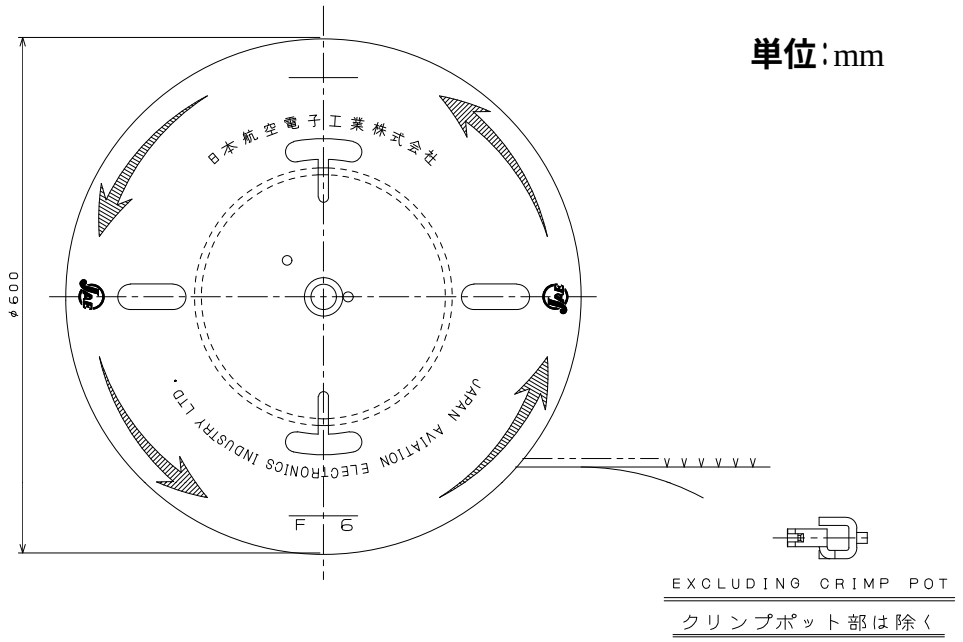
命名法

FI-R C3 – 1B – 1E – 15000

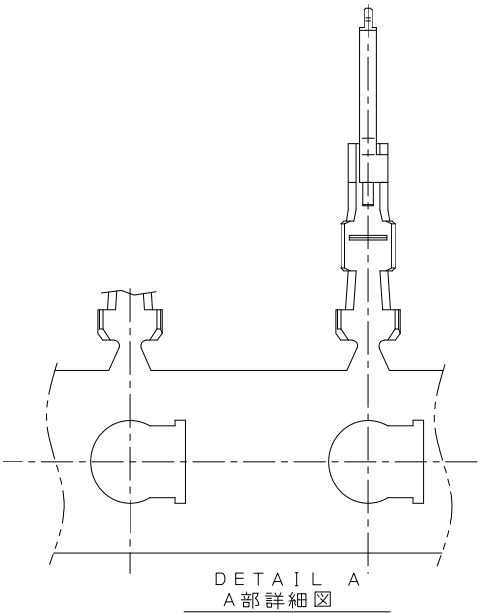
- FI-R：ｼﾘｰｽﾞ名
- C3：圧着ﾊｳｼﾞﾝｸﾞ用ｺﾝﾀｸﾄ
- 1B：下段ｺﾝﾀｸﾄ
- 1E：ﾓﾃﾞｨﾌｨｹｰｼｮﾝｺｰﾄﾞ **B3**
- 15000：ﾏｶﾞｼﾞﾝｱｾﾝﾌﾞﾘ15000本/ﾘｰﾙ



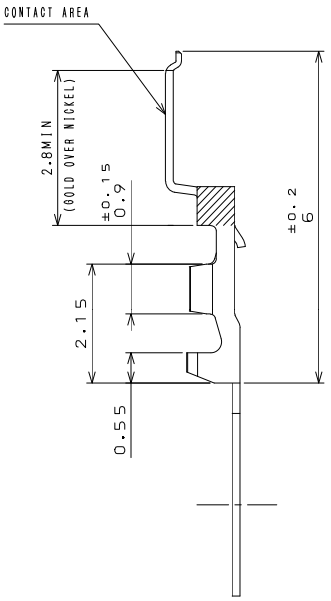
単位：mm



EXCLUDING CRIMP POT
クリンプポット部は除く



DETAIL A
A部詳細図
（SCALE 10：1）
（尺度 10：1）



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UL 1571 HOOK-UP WIRE
80℃ 30V PVC 電子線

UL Subject 758

UL FILE NO：E309338

▲說明：

- 導體使用單條或絞線最少至 50AWG 裸銅或鍍錫銅
- PVC 絕緣
- 額定溫度：80℃，額定電壓：30 Volts
- 使用標準厚度,易剝,截斷容易
- 可通過 UL 垂直型耐燃測試

Product Description:

- Tinned,annealed,stranded or Solid copper conductor,MIN,50AWG
- Color-coded PVC insulation
- Rated temperature: 80℃,Rated voltage: 30 Volts
- Uniform thickness of wire to ensure easy stripping and cutting
- Passed UL VW-1 vertical flame test

▲ 應用：

- 電子設備二次回路中內部連接用線。

Applications:

- Internal wiring of class 2circuits electronic epuipment

構造和電氣性能

Structure & electric properties



UL 1571	額 定 Range		導 體 Conducor		絕 緣 體 Insulation		公差值 Tolerance mm	最大導體阻抗 Maximum Conductor Resistance Ω/km	最小絕緣阻抗 Minimum Insulation Resistance Ω/km	絕緣耐電壓 (VAC/min) Insulation Potential Strength
	溫度 Temp °C	電壓 Voltage V	線號 AWG	構成 No./mm	厚度 Thickness mm	外徑 O.D. mm				
多芯線 Stranded	80°C	30V	28	7/0.127	0.10	0.60	±0.05	248	15	500

UL 1571 HOOK-UP WIRE
80℃ 30V PVC 電子線

UL Subject 758 UL FILE NO：E309338

STYLE			UL 1571		CSA
RATING TEMP / VOLT			80℃/30V		
CONDUCTOR	SIZE		AWG	28	
	NUMBER		NO.	7	
	DIAMETER		MM	0.127	
	MIN.DIAMETER		MM	0.120	
	CROSS SEC AREA OF COND	AVG.	CM	253	
		MIN		248	
	LAY OF BUNCH		INCH	0.50	
	MAX.RESISTANCE		Ω/KM	248	
INSULATION	O.D.(±0.05)		MM	0.60	
	INSULATION THICKNESS	AVG	MIL	4	
		MIN		3	
	JACKET THICKNESS	AVG	MIL		
		MI			
ADHESIVE TEST			KG		
INSULATION RESISTANCE			MΩ/KM	15	
SPARK TEST			KV	2	
ELONGATION			%	100	
TENSIL STRENGTH			PSI	1500	
ELO.(AFTER AGING)			%	OF UNAGED 65	
TEN.ST.(AFTER AGING)			%	OF UNAGED 70	
AGING TEMP TIME				113℃/168HRS	
OIL LMMERSION TEST					
FIAME TEST				VW-1	
HEAT SHOCK TEST				121℃/1HR 1.60MM MANDREL	
DEFORMATION TEST				113℃/1HR 50%	
COLD BEND TEST				-10℃/1HR 0.4MM MANDREL	
INSULATION POTENTIALST				500VAC/MIN	

印 字 內 容： 不印字

東莞市展宏膠粘製品有限公司

地　址：東莞市厚街鎮南五工業區
TEL：0769-85886010　85924688 FAX:0769-85902090

文　件 名　称	0.06mmKAPTON膠帶物性規格書	文件类型	WI
		文件編號	ZH-WI-043
		页数/页次	P -23(1)-1

1、適用範圍 ：

本說明書適用於本公司所生產之0.06MM KAPTON膠帶的各項品質特性要求。

2、採用材料：

2-1.聚醯亞胺膜

2-2.硅　　膠

3、產品用途:

可沖型，用於做高溫標籤，在smt過波峰及回流焊工藝中保護PCB金手指部位免於無鉛錫膏的腐蝕、或鋰電池內化學環境中固定等。適用於高溫遮蔽及其他有耐高溫要求行業。

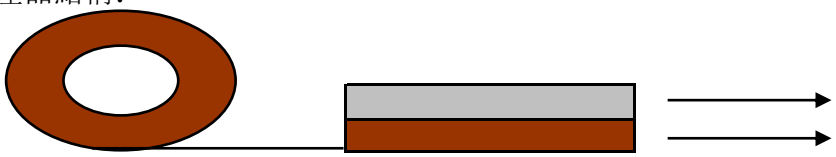
4、使用條件：

4-1.要使膠帶達到最佳粘貼效果，膠帶須在生產置放24h後方可使用，而且粘貼物表面必須是潔淨、乾燥的。粘貼後需施加2kg的壓力，以便膠帶與被粘物完全接觸，禁止用手直接觸摸膠帶的膠面，以免影響膠面粘性，被粘物應不具有明顯彈性

4-2.先將遮蔽膠帶粘貼位置選准，一次粘貼到位，不可反復揭貼。

4-3.遮蔽膠帶粘貼後，不要移動，保持24小時。

5.產品結構：



6產品規格：

項　目	單　　位	物性值	說　　明
厚　度	mm	0.06mm±0.01mm	——
寬　度	mm	500mm	可按客戶要求切卷、切片
長　度	m	33m	——

7產品物性：

項　目	單　　位	物性值	說　　明
初期力	$kg/inch^2$	≥0.8	以180° 角度、300mm/min速度作剝離測試
粘著力	$kg/inch^2$	≥0.4	以2kg/inch貼合SUS後，靜置20分鐘，再以180° 角度、300mm/min速度作剝離測
保持力	h	≥24	以2kg/inch貼合SUS後,再以1kg砝碼懸挂測試
伸長率	%	20	——
耐溫性	℃	230	230℃30Min无残胶
耐電壓	KV/1″	3	——
絕緣等級	-------	H	——

注：本表所列之數值僅作參考，其功能性是否適合，請使用者自行驗證

7、存儲

7-1.常態下保存，避免日光直射，溫度：23℃±2℃;濕度：65%±5%RH的環境下儲存最佳

7-2.保質期六個月

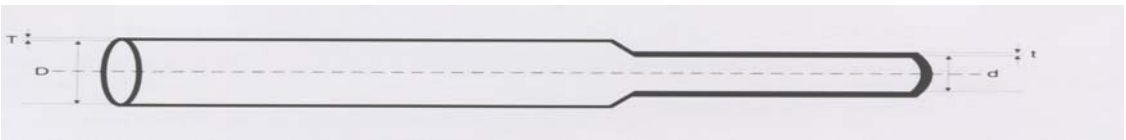
8、此產品符合歐盟ROHS指令要求

展宏文管中心發行	審　核	復　核	製　錶	制定日期
				2011-04-01

标准型(S-901)热缩套管尺寸检验标准

产品规格	收缩前尺寸(mm)		完全收缩后尺寸(mm)		包装长度 M
	内径(D)	壁厚(T)	内径(D)	壁厚(T)	
Φ0.8	0.9±0.2	0.15±0.08	≤0.4	0.30±0.06	400±2
Φ1.0	1.5±0.2	0.15±0.08	≤0.6	0.36±0.06	400±2
Φ1.5	2.0±0.2	0.18±0.08	≤0.8	0.40±0.08	400±2
Φ2.0	2.5±0.2	0.18±0.08	≤1.00	0.42±0.08	400±2
Φ2.5	3.0±0.2	0.18±0.08	≤1.25	0.42±0.08	400±2
Φ3.0	3.5±0.3	0.22±0.10	≤1.5	0.46±0.08	400±2
Φ3.5	4.0±0.3	0.25±0.10	≤1.75	0.46±0.08	400±2
Φ4.0	4.5±0.3	0.25±0.10	≤2.0	0.48±0.08	400±2
Φ4.5	5.0±0.3	0.25±0.10	≤2.25	0.50±0.10	400±1
Φ5.0	5.5±0.4	0.25±0.10	≤2.5	0.50±0.10	200±1
Φ6.0	6.5±0.4	0.28±0.12	≤3.0	0.56±0.10	200±1
Φ6.5	7.0±0.4	0.28±0.12	≤3.25	0.56±0.10	200±1
Φ7.0	7.5±0.4	0.28±0.12	≤3.5	0.58±0.10	100±1
Φ8.0	8.5±0.5	0.28±0.12	≤4.0	0.60±0.10	100±1
Φ9.0	9.5±0.5	0.30±0.12	≤4.5	0.60±0.10	100±1
Φ10	10.5±0.5	0.30±0.12	≤5.0	0.60±0.10	100±1
Φ11	11.5±0.5	0.30±0.12	≤5.5	0.60±0.10	100±1
Φ12	12.5±0.5	0.30±0.12	≤6.0	0.60±0.10	100±1
Φ13	13.5±0.5	0.35±0.12	≤6.5	0.65±0.12	100±1
Φ14	14.5±0.5	0.35±0.12	≤7.0	0.65±0.12	100±1
Φ15	15.5±0.5	0.40±0.12	≤7.5	0.65±0.12	100±1
Φ16	16.5±0.5	0.36±0.12	≤8.0	0.65±0.12	50±0.5
Φ17	17.5±0.5	0.36±0.12	≤8.5	0.65±0.12	50±0.5
Φ18	18.7±0.6	0.40±0.15	≤9.0	0.70±0.12	50±0.5
Φ20	20.6±0.6	0.40±0.15	≤10.0	0.75±0.15	50±0.5
Φ22	22.7±0.6	0.40±0.15	≤11.0	0.80±0.15	50±0.5
Φ25	25.5±0.7	0.40±0.15	≤12.5	0.90±0.15	50±0.5
Φ28	29.0±0.7	0.45±0.20	≤14.0	0.95±0.15	50±0.5
Φ30	31.0±0.7	0.45±0.20	≤15.0	0.95±0.15	50±0.5
Φ35	36.0±1.0	0.50±0.22	≤17.5	1.00±0.20	50±0.5
Φ40	41.0±1.0	0.55±0.25	≤20.0	1.10±0.25	50±0.5
Φ45	46.0±1.0	0.55±0.25	≤22.5	1.10±0.25	50±0.5
Φ50	51.5±1.5	0.60±0.25	≤26.0	1.20±0.25	50±0.5
Φ55	≥55	0.60±0.25	≤28.0	1.20±0.25	50±0.5
Φ60	≥60	0.60±0.25	≤30.0	1.20±0.25	50±0.5
Φ70	≥70	0.70±0.30	≤35.0	1.45±0.25	50±0.5
Φ80	≥80	0.70±0.30	≤40.0	1.45±0.25	50±0.5
Φ95	≥95	0.70±0.30	≤45.0	1.45±0.25	50±0.5
Φ100	≥100	0.70±0.30	≤50.0	1.45±0.25	50±0.5

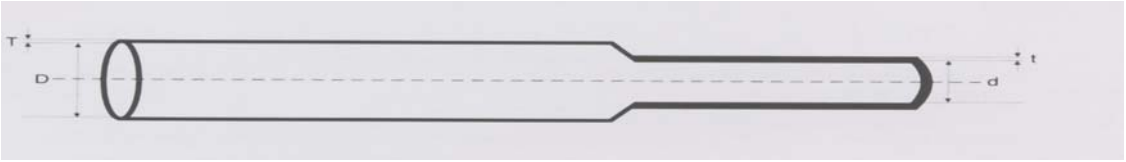
附产品图示:



薄壁型(S-901A)热缩套管尺寸检验标准

产品规格	收缩前尺寸(mm)		完全收缩后尺寸(mm)		包装长度 M
	内径(D)	壁厚(T)	内径(D)	壁厚(T)	
Φ0.5	0.7±0.2	0.09±0.05	≤0.4	0.22±0.06	400±2
Φ0.6	0.8±0.2	0.12±0.05	≤0.4	0.22±0.06	400±2
Φ0.8	0.9±0.2	0.12±0.05	≤0.4	0.25±0.06	400±2
Φ1.0	1.5±0.2	0.10±0.05	≤0.6	0.25±0.06	400±2
Φ1.5	2.0±0.2	0.10±0.05	≤0.8	0.25±0.06	400±2
Φ2.0	2.5±0.2	0.13±0.06	≤1.00	0.28±0.06	400±2
Φ2.5	3.0±0.2	0.15±0.06	≤1.25	0.28±0.06	400±2
Φ3.0	3.5±0.3	0.15±0.06	≤1.5	0.30±0.06	400±2
Φ3.5	4.0±0.3	0.15±0.06	≤1.75	0.30±0.06	400±2
Φ4.0	4.5±0.3	0.15±0.06	≤2.0	0.30±0.06	400±2
Φ4.5	5.0±0.3	0.15±0.06	≤2.25	0.30±0.06	400±1
Φ5.0	5.5±0.4	0.15±0.06	≤2.5	0.30±0.06	200±1
Φ6.0	6.5±0.4	0.15±0.06	≤3.0	0.30±0.06	200±1
Φ7.0	7.5±0.4	0.18±0.08	≤3.5	0.36±0.08	200±1
Φ8.0	8.5±0.5	0.18±0.08	≤4.0	0.36±0.08	200±1
Φ9.0	9.5±0.5	0.18±0.08	≤4.5	0.36±0.08	200±1
Φ10	10.5±0.5	0.18±0.08	≤5.0	0.36±0.08	200±1
Φ11	11.5±0.5	0.18±0.08	≤5.5	0.36±0.08	200±1
Φ12	12.5±0.5	0.18±0.08	≤6.0	0.36±0.08	100±1
Φ13	13.5±0.5	0.20±0.08	≤6.5	0.40±0.10	100±1
Φ14	14.5±0.5	0.20±0.08	≤7.0	0.40±0.10	100±1
Φ15	15.5±0.5	0.20±0.08	≤7.5	0.40±0.10	100±1

附产品图示:



说明：我公司生产的热缩套管**产品铅、镉、汞、六价铬、PBB、PBDE等环境管理物质含量**符合欧盟 **RoHS** 指令和 **SONY SS-00259** 环境技术标准，其中黑色热缩套管是无卤环保产品。

UL 热缩套管性能特性表

阻燃、柔软、绝缘、低温收缩
收缩比率：2：1
纵向收缩率：≤5%
最低收缩温度：90℃
连续使用温度：-55℃~125℃

性能 Properties

性能 Properties	测试条件 Condition	指标 Value
物理性能：抗张强度 Physical: Tensile strength		≥10.4Mpa
断裂伸长率 Elongation		≥200%
老化后抗张强度 Tensile strength afrer aging	158±1℃,168hr	不小于老化前的 70% ≥70% of original
老化后断裂伸长率 Elongation after aging		≥100%
热冲击 Heat shock	250℃,1hr	无裂纹 No cracking
冷弯曲 Cold bend	-30℃,1hr	无裂纹 No cracking
电性能： 绝缘耐压 Electrical: DielectricVoltage withstan	60sec	≥2500V
体积电阻率 Volume resistivity		$\geq 10^{14}$ Ω·cm
化学性能：铜腐蚀 Corrosion	158±1℃,168hr	Pass
Chemical: 铜稳定性 Copper stability	158±1℃,168hr	伸长率≥100%
阻燃性 Flammability	VW-1	Pass
电压等级 Voltage rating	600V/300V	
温度等级 Temperature rating	125℃	

材 质 说 明

我司热缩环保热缩套管是一种阻燃型的热收缩套管，组成材料为聚烯烃材料附加适量助剂，具体组成如下，

产品铅、镉、汞、六价铬、PBB、PBDE 等环境管理物质含量符合 SONY 及欧盟 RoHS 法令环保要求。

原料名称			使用目的	含量	CAS No.
中文	ENGLISH	分子式			
乙烯醋酸乙烯酯	EVA	（CH_2-CH_2）m -(CH_2-CH-$COOCH_3$)n	主剂	50%	24937-78-7
氢氧化镁	ATH	$Mg(OH)_2$	阻燃剂	40%	1309-42-8
磷系阻燃剂	MP	$P_mN_nH_xO_y$	阻燃剂	6%	7723-14-0
色母	pigment	色粉+EVA+填充剂	着色剂	4%	

規 格 書

SPECIFICATION FOR APPROVAL

品 名：

STYLE： TINNED COPPER BRAID WRAP

規 格：

SIZE ： TD 168/0.12

認證標誌：

APPROVAL MARK：

認證編號：

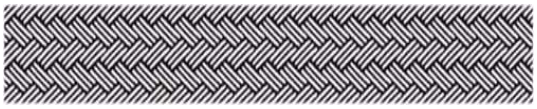
FILE NO ：

APPROVAL	CONFIRMATION	MAKER
姚茂然	姚茂然	*陳琳*

東莞市吉泓電子有限公司

地址：東莞市虎門鎮南柵第六工業區

TEL：(0769)81550611 FAX：(0769) 85356601

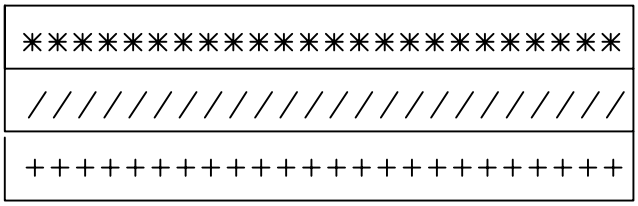
SPECIFICATION			
DOCUMENT NO	B16812TS01	ESTABLISHED DATE	2017/02/08
STYLE	TINNED COPPER BRAID WRAP		
SIZE	168/0.120		
CONDUCTOR	CONSTRUCTION	0.12mm/168pis	
	Tin-Copper Diameter	0.12mm ±0.01mm	
	Weave Density	1inch=7node	
	MATERIAL	TINNED ANNEAL COPPER	
	Min Wide	3.50mm	
	Max Wide	3.90mm	
	Min Thick	0.60mm	
	Max Thick	0.90mm	
	Drawing		

APPROVAL: 姚茂然 CONFIRMATION:姚茂然 MAKER:陳 琳

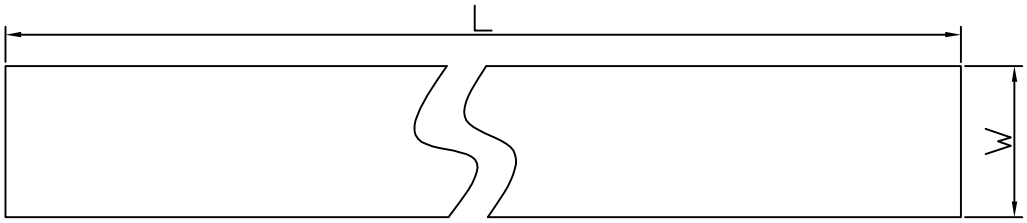
東莞市吉泓電子有限公司

地址：東莞市虎門鎮南柵第六工業區

TEL：0769-81550611 FAX：0769-85356601



产品构成图



備註：

1.符合本公司及客戶環保要求

2.公差:寬 ±0.5mm 長±0.3M

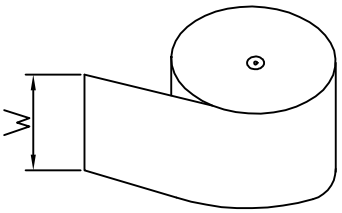
3.成卷

4.材質：醋酸布,厚度=0.21±0.02mm

5.粘著力：1.2kgf/inch

6.初粘：≦28CM

7.保持力：≧1440minute



8.膠帶應用之理想溫度範圍是23℃±５℃，濕度範圍是55%±5%,建議使用時黏貼表面不低於10℃,否則容易因膠體太硬,而無法牢固地貼合被貼物,減低膠帶粘著力.高於35℃以上時,膠體會軟化,破坏性能,黏貼較容易張口.膠帶儲存於低溫環境下,需將膠帶回溫至室溫(約23℃)三小時以上再行使用.膠帶於高溫加熱環境狀態下使用時,瞬間溫度勿超過180℃.

9.由於布類染色每批都會有有顏色差異及布的紋路不同，但不會影響到產品的性能。

10.膠帶應放置恒溫恒濕之環境,避免高溫濕或日曬,以妥爲保管條件下,品質證期間爲製造出廠三個月內.



客戶回簽蓋章	版次	版次說明	日期	東莞市信名寬電子科技有限公司			
	A1	新承認	20201114				
				規格	WmmX Lm	單位	mm
				品名料號	醋酸布（1152XY）	客戶	穩德
				客戶料號		繪圖	
				圖檔號	BY0026-20201116-WXL	審核	葉樹明

東莞市信名寬電子科技有限公司

樣品檢驗報告

客戶名稱	穩德		客戶料號	系列		檢驗日期:	2020/11/16		
產品名稱	醋酸布膠帶		產品型號	1152XY		樣品規格	25.4mmX30M3	樣品數量	3R
抽樣水準	AQL(MIL-STD-105EⅡ) CR=0 MAJ=0.4 MIN=1.5								
檢驗項目	單位	標準值	公差	測試值			判定	說明	
長度	M	30.0	±0.5	30.1	30.1	30.1	■OK □NG	直尺	
寬度	mm	25.4	±0.5	25.4	25.5	25.4	■OK □NG	直尺	
厚度	mm	0.210	±0.02	0.209	0.206	0.208	■OK □NG	測厚儀	
粘著力	kg/inch	1.2	≧1.2	1.67	1.67	1.67	■OK □NG	在25℃以2Kg/inch貼合測試貼合後靜置20分鐘，再以180°反向拉張速度300mm/min(詳見剝离力測試報告)	
保持力	minute	1440	≧1440	1522	1537	1535	■OK □NG	對SUS 304 Plate以2Kg/inch貼合測試	
外觀	□臟污 □折皺 □氧化 □線條 □破損 □色差						■OK □NG	目視	
其它	■ 環保物料 □ 非環保物料						■OK □NG	SGS報告	
最終判定	■ ACC □ REJ								
備注	(A) 儲存條件: 溫度 23℃±5℃ 相對濕度55RH%±5請至於陰涼之所,避免高溫高濕或日晒.							■	
	(B) 請戴指套(手套)作業,以免指紋有汗導至產品氧化							□	
	(C) 搬運時請輕拿經放,注意產品使用方式,以達最佳效果.							■	
	(D) 未使用完之部份請及時密封,請遵照儲存條件及先進先出方式,出廠后保質期三個月.							■	

注意事項: 請選擇產品適用項, 適用選■ 不適用選 □

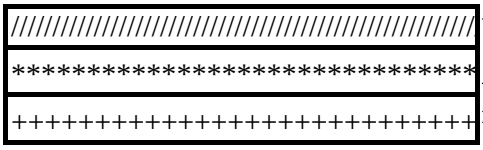
核准： 葉樹明　　審核：　　檢驗員：朱康

QP-013-02B　　REV:A0

東莞市信名寬電子科技有限公司
廣東省東莞市石碣鎮新風中路下一村工業區 TEL:0769-87337737/8 FAX:0769-87337739

Hotech-1152XY黑色醋酸布膠帶 (Acetate Cloth Tape)

結構剖面圖 (Constructure)



1.材質說明 (Material Data)

項 目 (Item)	材 質(Material)	厚 度(Thickness)	說 明(Description)
基材(Base Material)	醋酸布(Acetate Cloth)	0.17±0.01mm	Black
膠體(Adhesive)	壓克力膠(Acrylic Adhesive)	0.03±0.01mm	感壓性膠(Pressure Sensitive Adhesive)

2.特性(Characteristics)

項目 (Item)	單位(Unit)	測試值(Value)	說明(Description)
粘著力 (Adhesive Strength with 180° Peel)	Kgf	≧1.0	在25℃以2Kg/inch貼合測試貼合後靜置20分鐘，再以180°反向拉張速度300mm/min
保持力(Holding Power)	minute	≧1440	對SUS 304 Plate以2Kg/inch貼合測試
抗張強度 (Tensile Strength)	Kgf	≧5.5	
延伸率(Elongation)	%	≦12	
擊穿電壓 (Breakdown Voltage)	KV	≧1.5	

3.使用條件:

3.1.線材包覆需考量粘着面積,一般最好能有寬度3mm以上粘着面積,布种厚度增加寬度相對增加.

3.2.包覆鐵氟龔線材粘着寬度在5mm以上面積.

3.3.包覆線材須對折捆扎時,粘著寬度最好能在5mm以上面積或選用薄且柔軟佈种.

3.4.線材越細選用的布种要能越薄越柔軟.

3.5.由於粘合膠屬於感壓性壓克力膠在粘著時須有一定力量去做壓合動作,使其黏膠完全附著被貼物上,一般都需要在(0.5~1)kg以上力道在終端處做壓合,可參考我司出貨檢驗標准壓合力道.

3.6.感壓型壓克力膠會因被貼物，被貼面（粗細）壓克力的不同有不同的粘著效果（剝離力）。

4.高/底溫狀況下之使用條件:

膠帶應用之理想溫度範圍是23℃±５℃，濕度範圍是55%±5%,建議使用時黏貼表面不低於10℃,否則容易因膠體太硬,而無法牢固地貼合被貼物,減低膠帶粘著力.高於35℃以上時,膠體會軟化,破坏性能,黏貼較容易張口.膠帶儲存於低溫環境下,需將膠帶回溫至室溫(約23℃)三小時以上再行使用.膠帶於高溫加熱環境狀態下使用時,瞬間溫度勿超過180℃.

5.以客戶需求有分輕重離型,輕在(4-15)克,重在(25-35)克

5.1.輕型紙(4-15)克適合沖大規格及基材厚度薄、軟的產品上,小於10cm*10cm以下且又是直條式產品會有容易剝落現象.

5.2.重型紙(25-35)克適合沖10cm*10cm直條式規格產品,若超出這範圍時會造成離型過重難撕開或膠有略拉絲現象

6.包裝:

膠帶卷料成品以熱縮膜包裝,片狀成品以包裝袋完成包裝,並裝於適當之紙箱內.

7.膠帶之保管及品質保證期間:

膠帶應放置恒溫恒濕之環境,避免高溫濕或日曬,以妥爲保管條件下,品質證期間爲製造出廠三個月內.

8.提示說明:

由於壓敏膠系列的膠水與鐵氟龍、PVC材質的材料不相溶,故壓敏膠系列的產品不適用於此類產品.

以上數據之取得是透過多次測試所得之平均值,使用者須確定此產品是否適用於某一特定用途及是否適用者的應用方式很多因不會影響產品在特定用途中的性能,若對本公司產品尚有疑問，敬請聯絡本公司人員,以便爲您提供更詳細的說明與服務.谢谢！

物質安全資料表

MATERIAL SAFETY DATA SHEET(MSDS)

1	供应商资料	物品名稱 : 醋酸布胶带						
		供應商名稱 :東莞市信名寬電子科技有限公司						
		地址 : 東莞市石碣鎮新風中路下一村工業區						
		緊急聯絡人: 葉樹明			電話: 0769-87337737			
	成份辨识资料	主要危害物质名称			化学文摘社登记号码CAS NO:	浓度或浓度范围(成份百分比)			危害物质分类及图示
		成份名称	化学式	含量(%)		时量平均容许浓度TWA	短时间时量平均容许浓度	最高容许浓度CEILING	
		醋酸纤维	Plyester	41.2%	9004-35-7	/	/	/	
		分散蓝	C19H19N5O4	0.8%	61968-29-4	/	/	/	
		丙稀酸	C3H4O2	35.50%	79-10-7	None	None	None	
		原纸	None	20.5%	None	None	None	None	
		PE	(C2H3Cl)n	1.4%	9002-88-4	None	None	None	
		硅油	C6H18OSi2	0.6%	63148-62-9	None	None	None	
3	危害辨识资料	最重要危害效应						
		健康危害效应： 配方中所含的化学物质与皮肤长时间接触可能会有刺激和发炎症状，						
		环境影响：无						
		物理性及化学与危害：没有引燃和爆炸之危险性。						
		特殊危害：无						
		主要症状：皮肤泛红并有红点出现。						
		物品危害分类：第四级。						
4	急救措施	不同暴露途徑之急救方法: 1.食入: 給患者喝水以稀釋之,必要時應即時送醫處理						
		最重要危害效應:無						
		對急救人員防護:無						
		對醫師之提示:無						
5	滅火措施	適用滅火器: 二氧化碳,泡沫,乾粉化學滅火器,在火源及周圍噴濕.						
		滅火時可能遭遇特殊危害: 本產品不會自然燃燒,但在加熱時會有瓦斯氣體產生爆炸.						
		特殊滅火程序: 非相關滅火人員應往上風處散開.						
		消防人員之特殊防護設備:無						
6	洩漏處理方法	個人應注意事項:本產品有絲屑落在床上時,基本上對人體無礙,但無法還原再使用時,以焚燒或掩埋方式處理.						
		環境注意事項: 不要任意丟棄在河川以避免阻塞.						
		清理方法: 適當用掃除工具清理后有掩埋或焚燒方式處理.						
7	安全處置與儲存	處置:廢棄物可掩埋或焚燒處理.						
		儲存:存放於遠離火源的地方,避免陽光照射,並保持作業處空氣流通,開封后要長時間放置時一定要再做適當的捆包.						

8	暴露預防措施	工程控制:無	
		參數控制:無	
		個人防護設備:口罩,手套	
		呼吸防護:使用口罩,以避免吸入粉塵粒子	眼睛防護:無
		手部防護:戴手套以保護手部皮膚.	皮膚及身體防護:無
		衛生措施:工作完備后或進食前應洗手及臉部.	
9	物理及化學性質	物質狀態:固體	形狀:無
		顏色:黑色	氣味:無
		PH值:7~8	沸點/沸點範圍:200℃(760mm Hg)
		分解溫度:175℃	閃火點:> 88℃
			測試方法:無
		耐高溫：80℃	爆炸界限:無
		蒸氣壓:< 0.3mm Hg(20℃)	蒸氣密度:9.5(空氣=1)
		密度: 93.0±2.0kg/m^2	溶解度:水中溶解度< 1%
10	安定性及反應性	安定性:安定	
		特殊狀況下可能危害反應: 對於通常使用狀態下及適當的貯存環境之下,空氣常溫之下.	
		應避免狀況:遠離易燃性,可燃性物質.	
		應避免之物質:強氧化劑,火源.	
		危害分解物:加熱后,分解可能產生一氧化碳,瓦斯氣體.	
11	毒性資料	急毒性:無	致敏感性:無
		局部效應: 本產品主要結構是以polyestal爲基材的布帛,至目前止客戶使用后尚未發生對健康上有影響之事發	
		慢毒性或長期毒性:無	
		特殊效應:無	
12	生態資料	可能環境影響/環境流佈: 本產品對於水即在空氣中都非常安定,長時間貯存或貯存條件不良時,易造成產品酸化現象.	
13	廢棄處置	廢棄處置方法:本產品非屬危險的"危險的廢棄物"所以在政府許可的焚燒場所及掩埋都可以作處理.	
14	運送資料	國際運送規定:無	
		聯合國編號:無	
		國內運送規定:無	
		特殊運送方法及注意事項:無	
15	法規資料	適用法規:無	
16	其它	參考文獻:無	
		製表單位:品質保證室	名稱: 東莞市信名寬電子科技有限公司
			地址 ： 東莞市石碣鎮新風中路下一村工業區
		製表人:	職稱: 總監 姓名:葉樹明
		製表日期	公元 2019 年5 月15日

Test Report

Report No. A2230262860101011

Company Name shown on Report	KAI TAT INDUSTRIES COMPANY
Address	BUILDING 1, NO.2 CHANGZHEN ROAD,CHANGZHEN COMMUNITY,YUTANG STREET,GUANGMING DISTRICT,SHENZHEN CITY

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name	UL1061
Color	Gray jacket
Material	PVC Electronic wire
Sample Received Date	Jun. 1, 2023
Testing Period	Jun. 1, 2023 to Jun. 17, 2023

Test Requested	As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Hexabromocyclododecane (HBCDD), Phthalates in the submitted sample(s).
Test Method	Please refer to the following page(s).
Test Result(s)	Please refer to the following page(s).

****

Conclusion

Tested Sample	According to standard/directive	Result
Submitted Sample	RoHS Directive 2011/65/EU with amendment (EU) 2015/863	PASS

****

PASS means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

Approved by: Hill Zheng

Hill Zheng

Technical Manager

Date: Jun. 17, 2023

No. R262627962

Centre Testing International Group Co.,Ltd.
CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Test Report

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
Hexabromocyclododecane (HBCDD)	IEC 62321-9:2021	GC-MS
Phthalates	Refer to EN 14372:2004(E)	GC-MS

Test Report

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	011		
Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL	Limit
	011		
Polybrominated Biphenyls (PBBs)			
Monobromobiphenyl	N.D.	5 mg/kg	1000 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg	
Tribromobiphenyl	N.D.	5 mg/kg	
Tetrabromobiphenyl	N.D.	5 mg/kg	
Pentabromobiphenyl	N.D.	5 mg/kg	
Hexabromobiphenyl	N.D.	5 mg/kg	
Heptabromobiphenyl	N.D.	5 mg/kg	
Octabromobiphenyl	N.D.	5 mg/kg	
Nonabromobiphenyl	N.D.	5 mg/kg	
Decabromobiphenyl	N.D.	5 mg/kg	

Tested Item(s)	Result	MDL	Limit
	011		
Polybrominated Diphenyl Ethers (PBDEs)			
Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg	
Tribromodiphenyl ether	N.D.	5 mg/kg	
Tetrabromodiphenyl ether	N.D.	5 mg/kg	
Pentabromodiphenyl ether	N.D.	5 mg/kg	
Hexabromodiphenyl ether	N.D.	5 mg/kg	
Heptabromodiphenyl ether	N.D.	5 mg/kg	
Octabromodiphenyl ether	N.D.	5 mg/kg	
Nonabromodiphenyl ether	N.D.	5 mg/kg	
Decabromodiphenyl ether	N.D.	5 mg/kg	

Test Report

Report No. A2230262860101011

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	011		
Phthalates (DBP, BBP, DEHP, DIBP)			
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL
	011	
Hexabromocyclododecane (HBCDD)	N.D.	20 mg/kg

Tested Item(s)	Result	MDL
	011	
Phthalates		
Di-2-propylheptyl phthalate (DPHpP) CAS#:53306-54-0*	N.D.	30 mg/kg

Sample/Part Description

No.	CTI Sample ID	Description
1	011	Grey wire jacket

Remark: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL)

-mg/kg = ppm = parts per million

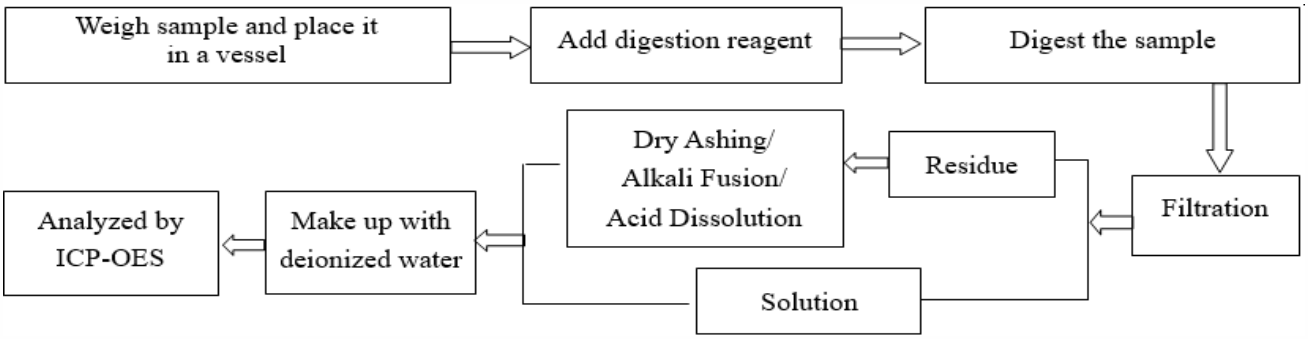
-1000 mg/kg = 0.1%

Note: ***Indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.**

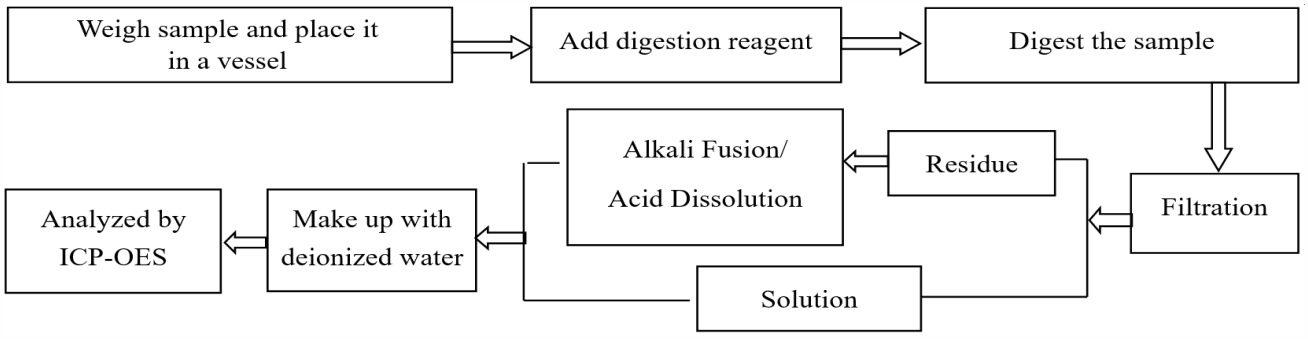
Test Report

Test Process

1. Lead (Pb), Cadmium (Cd), Chromium (Cr)

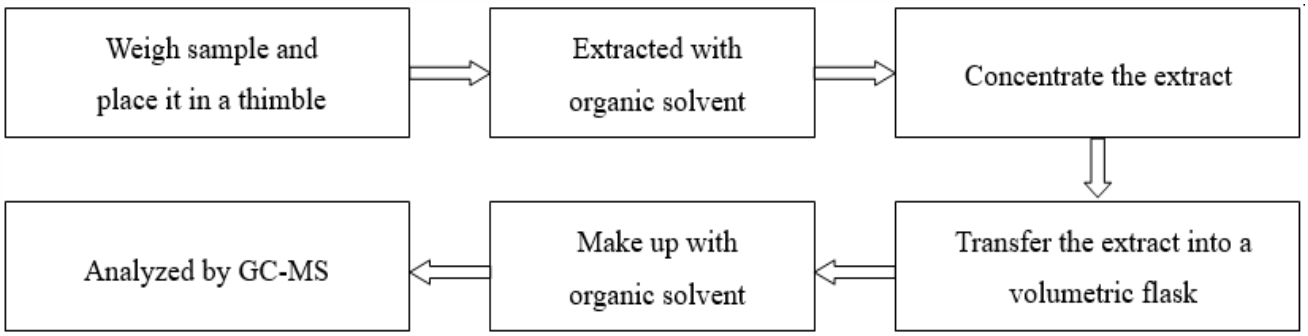


2. Mercury (Hg)

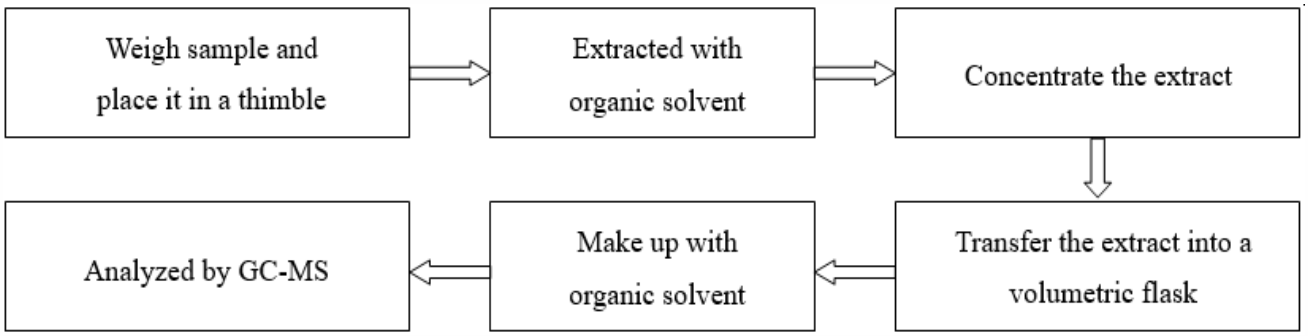


3. Hexavalent Chromium (Cr(VI))

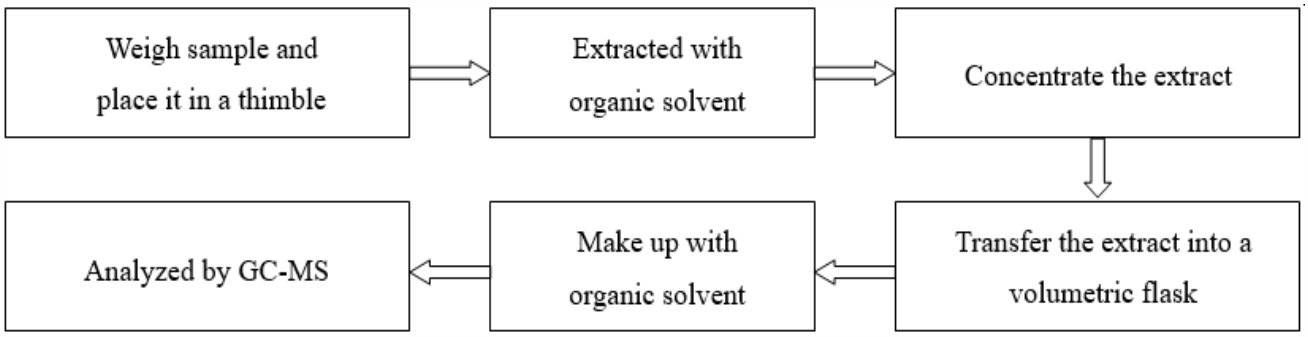
4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



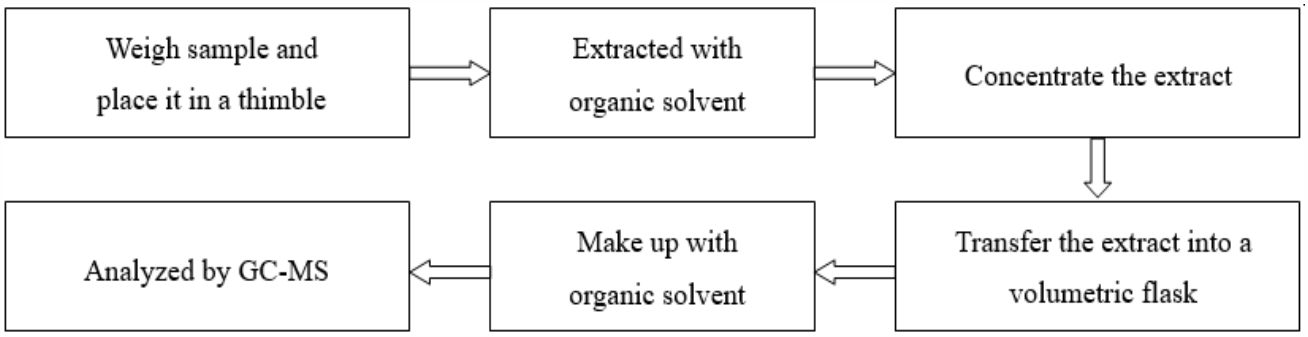
5. Phthalates (DBP, BBP, DEHP, DIBP)



6. Hexabromocyclododecane (HBCDD)



7. Phthalates



Test Report

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of report ***

Appendix

Client Reference Information

1007, 1061, 1095, 1571, 20276, 2468, 1015, 1617, 1672, 1185, 1533, 2464, 2547, 2517, 2854, 2835, 1430, 1431, 10272, 1032, 2651, 2661, 1569, 3443, 1028, 1685, 2103, 2661, 2920, 20080and FEIBIAO PVC LINE, CAR PVC LINE and rehearsal and line

Statement:

1. The Appendix Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
2. The Appendix Information is/are the supplement(s) for the Report A2230262860101011.

Test Report

Report No. A2230262860101012

Company Name shown on Report	KAI TAT INDUSTRIES COMPANY
Address	BUILDING 1, NO.2 CHANGZHEN ROAD,CHANGZHEN COMMUNITY,YUTANG STREET,GUANGMING DISTRICT,SHENZHEN CITY

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name	UL1061
Color	Brown jacket
Material	PVC Electronic wire
Sample Received Date	Jun. 1, 2023
Testing Period	Jun. 1, 2023 to Jun. 17, 2023

Test Requested	As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Hexabromocyclododecane (HBCDD), Phthalates in the submitted sample(s).
Test Method	Please refer to the following page(s).
Test Result(s)	Please refer to the following page(s).

****

Conclusion

Tested Sample	According to standard/directive	Result
Submitted Sample	RoHS Directive 2011/65/EU with amendment (EU) 2015/863	PASS

****

PASS means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

Approved by: Hill Zheng

Hill Zheng

Technical Manager

Date: Jun. 17, 2023

No. R262627962

Centre Testing International Group Co.,Ltd.
CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Test Report

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
Hexabromocyclododecane (HBCDD)	IEC 62321-9:2021	GC-MS
Phthalates	Refer to EN 14372:2004(E)	GC-MS

Test Report

Report No. A2230262860101012

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	012		
Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL	Limit
	012		
Polybrominated Biphenyls (PBBs)			
Monobromobiphenyl	N.D.	5 mg/kg	1000 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg	
Tribromobiphenyl	N.D.	5 mg/kg	
Tetrabromobiphenyl	N.D.	5 mg/kg	
Pentabromobiphenyl	N.D.	5 mg/kg	
Hexabromobiphenyl	N.D.	5 mg/kg	
Heptabromobiphenyl	N.D.	5 mg/kg	
Octabromobiphenyl	N.D.	5 mg/kg	
Nonabromobiphenyl	N.D.	5 mg/kg	
Decabromobiphenyl	N.D.	5 mg/kg	

Tested Item(s)	Result	MDL	Limit
	012		
Polybrominated Diphenyl Ethers (PBDEs)			
Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg	
Tribromodiphenyl ether	N.D.	5 mg/kg	
Tetrabromodiphenyl ether	N.D.	5 mg/kg	
Pentabromodiphenyl ether	N.D.	5 mg/kg	
Hexabromodiphenyl ether	N.D.	5 mg/kg	
Heptabromodiphenyl ether	N.D.	5 mg/kg	
Octabromodiphenyl ether	N.D.	5 mg/kg	
Nonabromodiphenyl ether	N.D.	5 mg/kg	
Decabromodiphenyl ether	N.D.	5 mg/kg	

Test Report

Report No. A2230262860101012

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	012		
Phthalates (DBP, BBP, DEHP, DIBP)			
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL
	012	
Hexabromocyclododecane (HBCDD)	N.D.	20 mg/kg

Tested Item(s)	Result	MDL
	012	
Phthalates		
Di-2-propylheptyl phthalate (DPHpP) CAS#:53306-54-0*	N.D.	30 mg/kg

Sample/Part Description

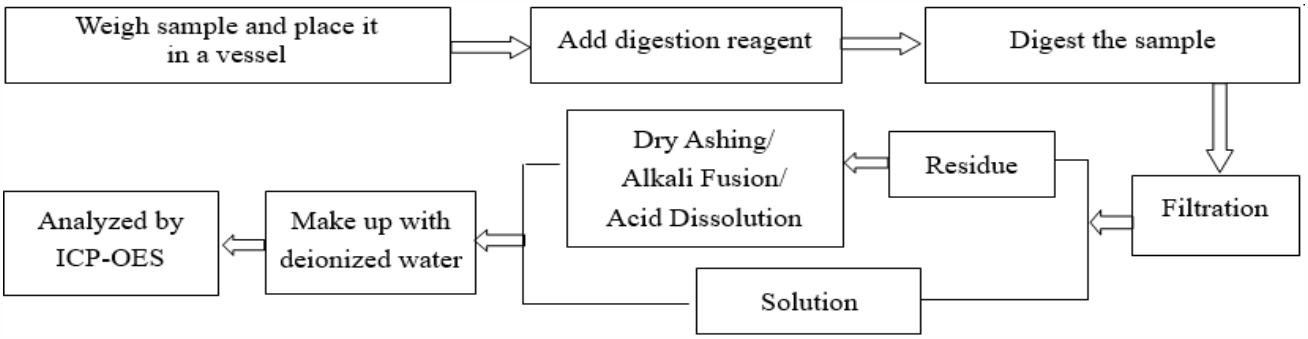
No.	CTI Sample ID	Description
1	012	Brown wire jacket

Remark: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million
-1000 mg/kg = 0.1%

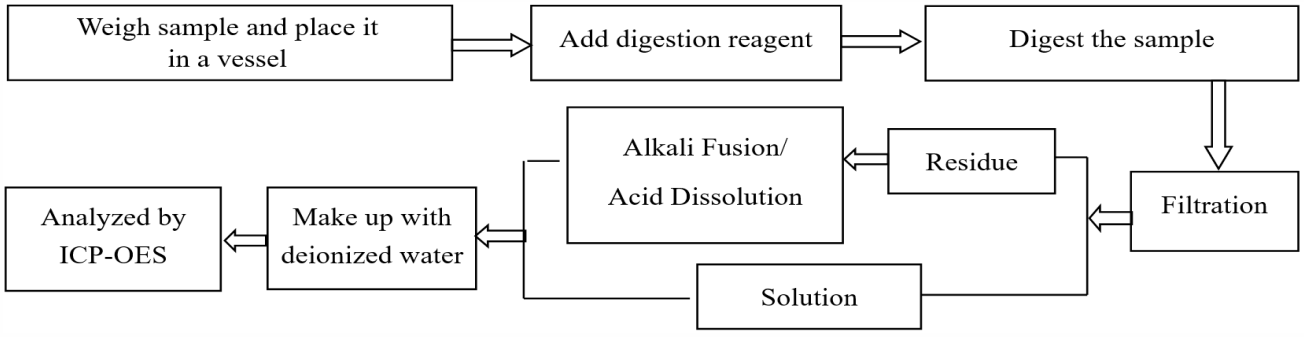
Note: ***Indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.**

Test Process

1. Lead (Pb), Cadmium (Cd), Chromium (Cr)

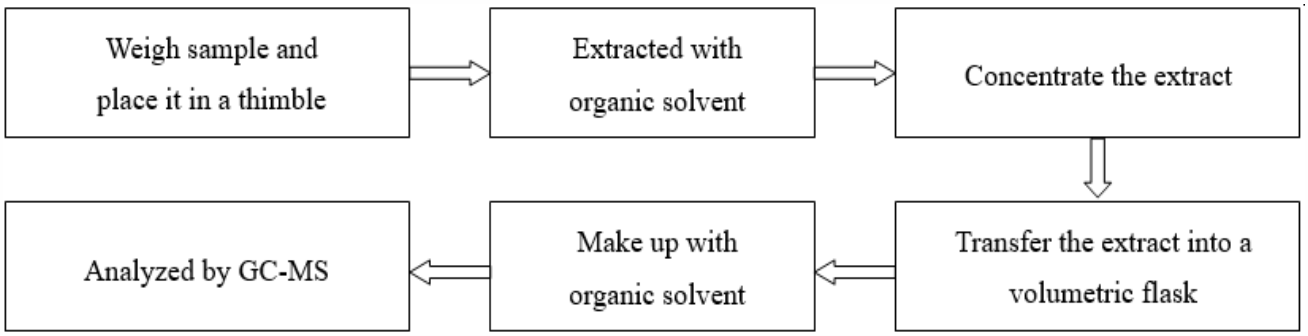


2. Mercury (Hg)

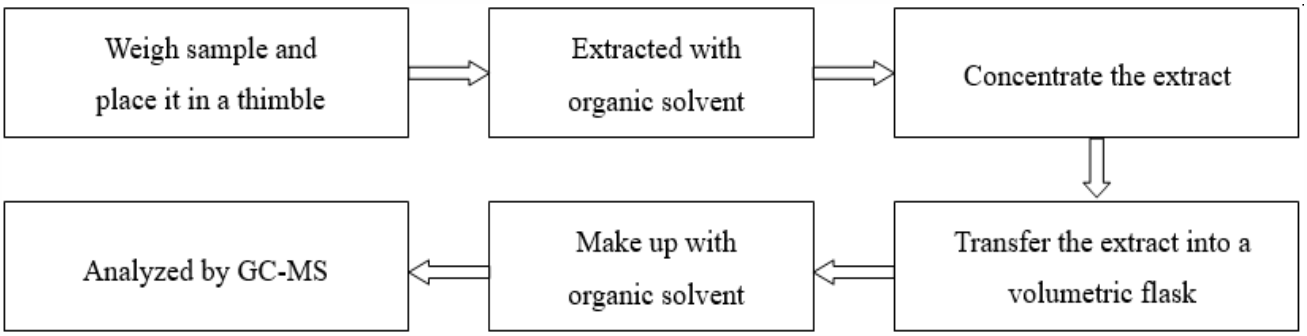


3. Hexavalent Chromium (Cr(VI))

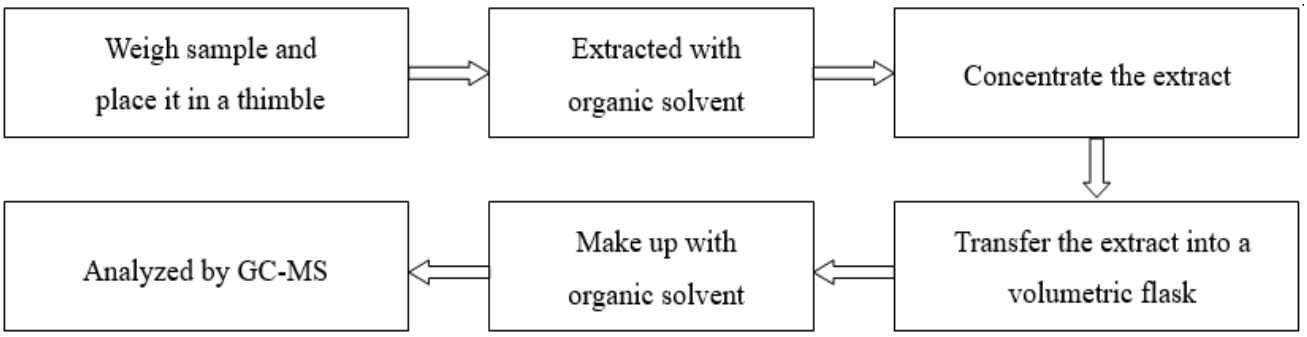
4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



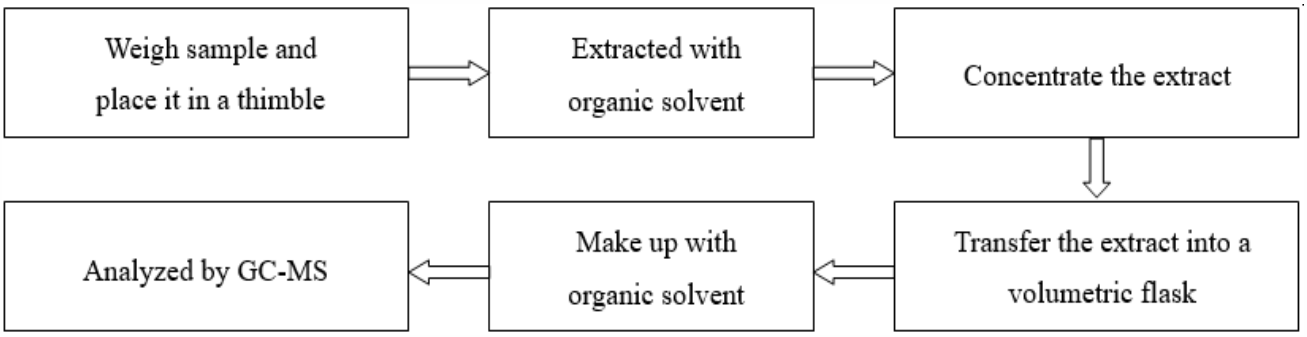
5. Phthalates (DBP, BBP, DEHP, DIBP)



6. Hexabromocyclododecane (HBCDD)

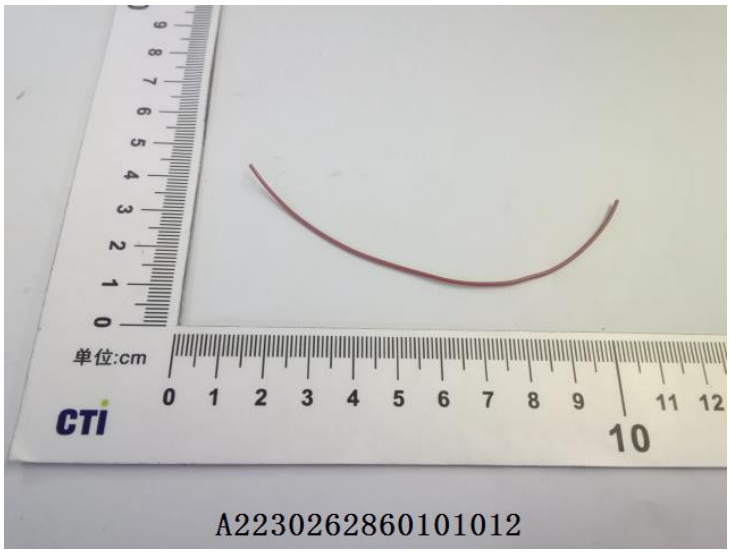


7. Phthalates



Test Report

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of report ***

Appendix

Client Reference Information

1007, 1061, 1095, 1571, 20276, 2468, 1015, 1617, 1672, 1185, 1533, 2464, 2547, 2517, 2854, 2835, 1430, 1431, 10272, 1032, 2651, 2661, 1569, 3443, 1028, 1685, 2103, 2661, 2920, 20080and FEIBIAO PVC LINE, CAR PVC LINE and rehearsal and line

Statement:

1. The Appendix Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
2. The Appendix Information is/are the supplement(s) for the Report A2230262860101012.

Test Report

Report No. A2230262860101013

Company Name shown on Report	KAI TAT INDUSTRIES COMPANY
Address	BUILDING 1, NO.2 CHANGZHEN ROAD,CHANGZHEN COMMUNITY,YUTANG STREET,GUANGMING DISTRICT,SHENZHEN CITY

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name	UL1061
Color	Blue jacket
Material	PVC Electronic wire
Sample Received Date	Jun. 1, 2023
Testing Period	Jun. 1, 2023 to Jun. 17, 2023

Test Requested	As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Hexabromocyclododecane (HBCDD), Phthalates in the submitted sample(s).
Test Method	Please refer to the following page(s).
Test Result(s)	Please refer to the following page(s).

****

Conclusion

Tested Sample	According to standard/directive	Result
Submitted Sample	RoHS Directive 2011/65/EU with amendment (EU) 2015/863	PASS

****

PASS means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

Approved by: Hill Zheng

Hill Zheng
Technical Manager

Date: Jun. 17, 2023

No. R262627962

Centre Testing International Group Co.,Ltd.
CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Test Report

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
Hexabromocyclododecane (HBCDD)	IEC 62321-9:2021	GC-MS
Phthalates	Refer to EN 14372:2004(E)	GC-MS

Test Report

Report No. A2230262860101013

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	013		
Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL	Limit
	013		
Polybrominated Biphenyls (PBBs)			
Monobromobiphenyl	N.D.	5 mg/kg	1000 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg	
Tribromobiphenyl	N.D.	5 mg/kg	
Tetrabromobiphenyl	N.D.	5 mg/kg	
Pentabromobiphenyl	N.D.	5 mg/kg	
Hexabromobiphenyl	N.D.	5 mg/kg	
Heptabromobiphenyl	N.D.	5 mg/kg	
Octabromobiphenyl	N.D.	5 mg/kg	
Nonabromobiphenyl	N.D.	5 mg/kg	
Decabromobiphenyl	N.D.	5 mg/kg	

Tested Item(s)	Result	MDL	Limit
	013		
Polybrominated Diphenyl Ethers (PBDEs)			
Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg	
Tribromodiphenyl ether	N.D.	5 mg/kg	
Tetrabromodiphenyl ether	N.D.	5 mg/kg	
Pentabromodiphenyl ether	N.D.	5 mg/kg	
Hexabromodiphenyl ether	N.D.	5 mg/kg	
Heptabromodiphenyl ether	N.D.	5 mg/kg	
Octabromodiphenyl ether	N.D.	5 mg/kg	
Nonabromodiphenyl ether	N.D.	5 mg/kg	
Decabromodiphenyl ether	N.D.	5 mg/kg	

Test Report

Report No. A2230262860101013

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	013		
Phthalates (DBP, BBP, DEHP, DIBP)			
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL
	013	
Hexabromocyclododecane (HBCDD)	N.D.	20 mg/kg

Tested Item(s)	Result	MDL
	013	
Phthalates		
Di-2-propylheptyl phthalate (DPHpP) CAS#:53306-54-0*	N.D.	30 mg/kg

Sample/Part Description

No.	CTI Sample ID	Description
1	013	Blue wire jacket

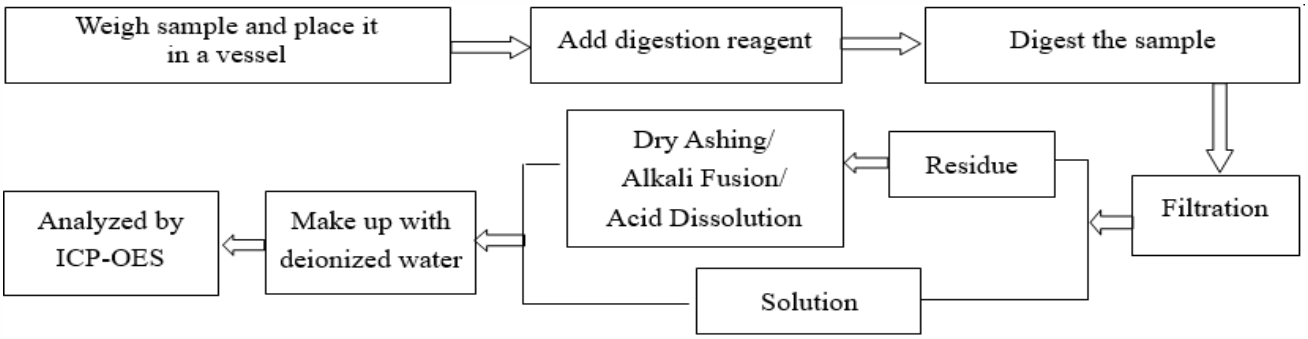
Remark: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million
-1000 mg/kg = 0.1%

Note: ***Indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.**

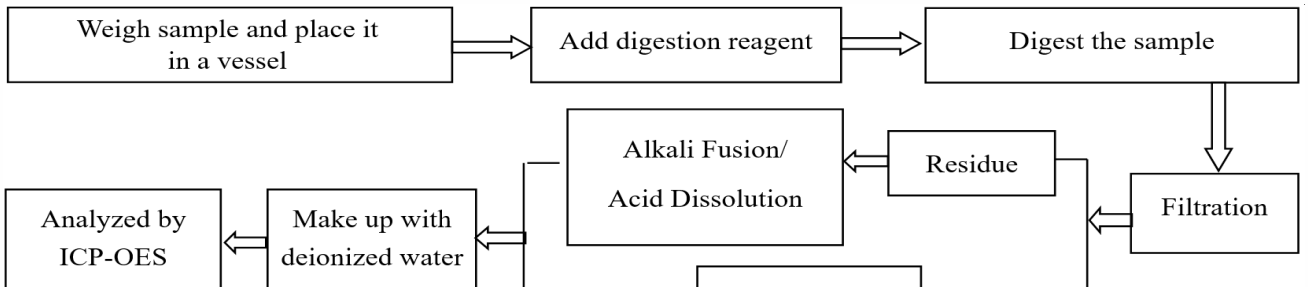
Test Report

Test Process

1. Lead (Pb), Cadmium (Cd), Chromium (Cr)

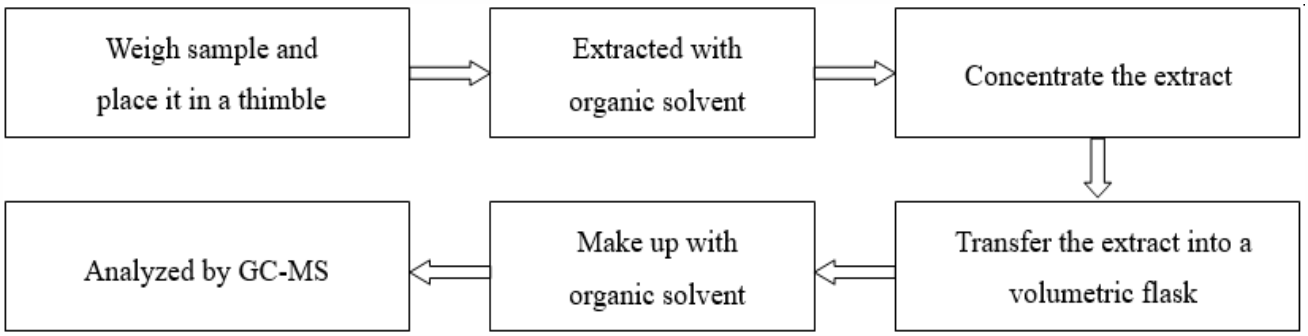


2. Mercury (Hg)

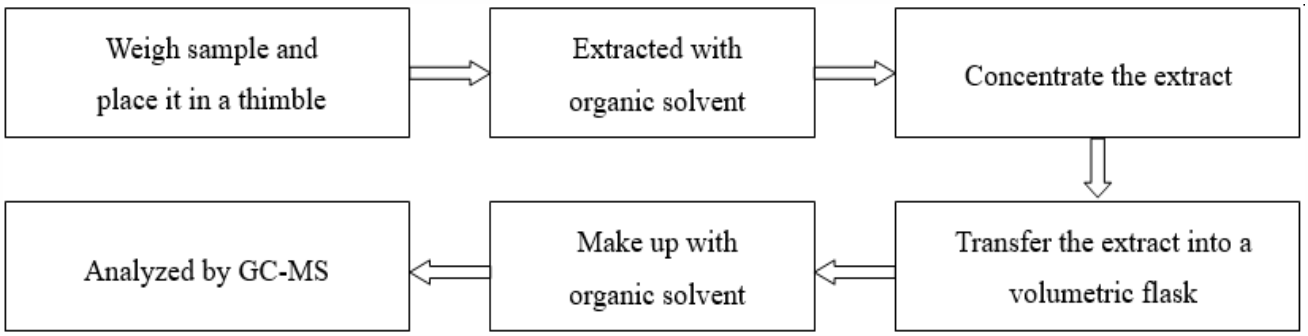


3. Hexavalent Chromium (Cr(VI))

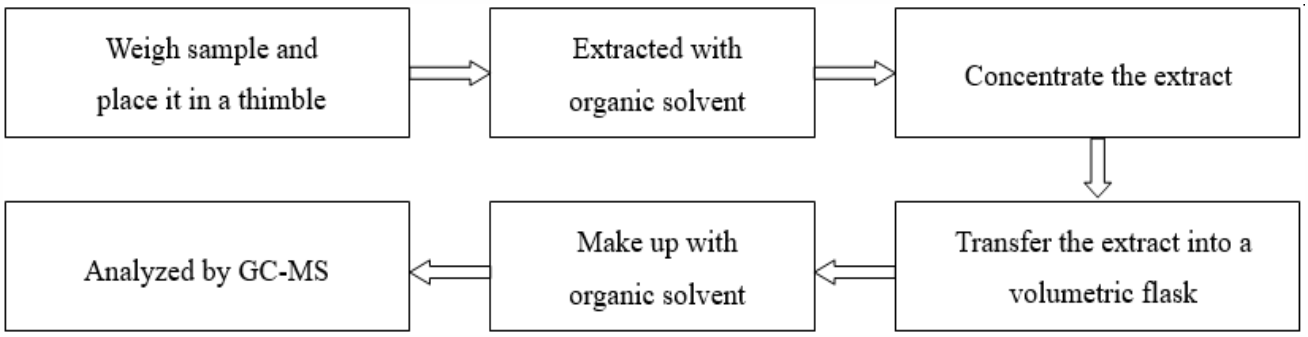
4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



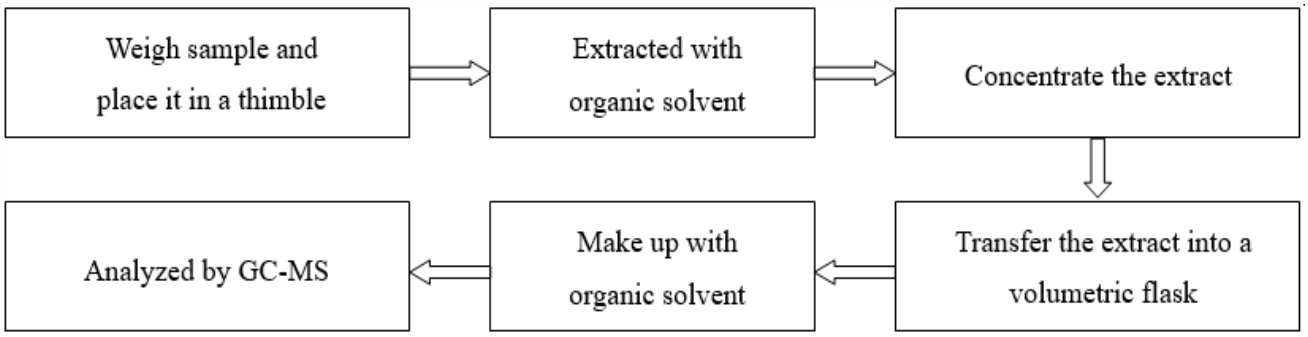
5. Phthalates (DBP, BBP, DEHP, DIBP)



6. Hexabromocyclododecane (HBCDD)



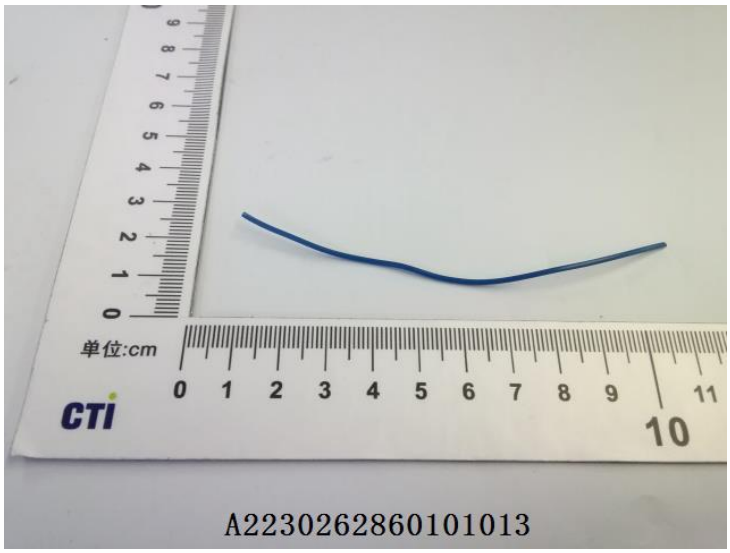
7. Phthalates



Test Report

Report No. A2230262860101013

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of report ***

Appendix

Client Reference Information

1007, 1061, 1095, 1571, 20276, 2468, 1015, 1617, 1672, 1185, 1533, 2464, 2547, 2517, 2854, 2835, 1430, 1431, 10272, 1032, 2651, 2661, 1569, 3443, 1028, 1685, 2103, 2661, 2920, 20080and FEIBIAO PVC LINE, CAR PVC LINE and rehearsal and line

Statement:

1. The Appendix Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
2. The Appendix Information is/are the supplement(s) for the Report A2230262860101013.

Test Report

Report No. A2230262860101014

Company Name shown on Report	KAI TAT INDUSTRIES COMPANY
Address	BUILDING 1, NO.2 CHANGZHEN ROAD,CHANGZHEN COMMUNITY,YUTANG STREET,GUANGMING DISTRICT,SHENZHEN CITY

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name	UL1061
Color	White jacket
Material	PVC Electronic wire
Sample Received Date	Jun. 1, 2023
Testing Period	Jun. 1, 2023 to Jun. 17, 2023

Test Requested	As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Hexabromocyclododecane (HBCDD), Phthalates in the submitted sample(s).
Test Method	Please refer to the following page(s).
Test Result(s)	Please refer to the following page(s).

****

Conclusion

Tested Sample	According to standard/directive	Result
Submitted Sample	RoHS Directive 2011/65/EU with amendment (EU) 2015/863	PASS

****

PASS means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

Approved by: Hill Zheng

Hill Zheng

Technical Manager

Date: Jun. 17, 2023

No. R262627962

Centre Testing International Group Co.,Ltd.
CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Test Report

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
Hexabromocyclododecane (HBCDD)	IEC 62321-9:2021	GC-MS
Phthalates	Refer to EN 14372:2004(E)	GC-MS

Test Report

Report No. A2230262860101014

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	014		
Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL	Limit
	014		
Polybrominated Biphenyls (PBBs)			
Monobromobiphenyl	N.D.	5 mg/kg	1000 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg	
Tribromobiphenyl	N.D.	5 mg/kg	
Tetrabromobiphenyl	N.D.	5 mg/kg	
Pentabromobiphenyl	N.D.	5 mg/kg	
Hexabromobiphenyl	N.D.	5 mg/kg	
Heptabromobiphenyl	N.D.	5 mg/kg	
Octabromobiphenyl	N.D.	5 mg/kg	
Nonabromobiphenyl	N.D.	5 mg/kg	
Decabromobiphenyl	N.D.	5 mg/kg	

Tested Item(s)	Result	MDL	Limit
	014		
Polybrominated Diphenyl Ethers (PBDEs)			
Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg	
Tribromodiphenyl ether	N.D.	5 mg/kg	
Tetrabromodiphenyl ether	N.D.	5 mg/kg	
Pentabromodiphenyl ether	N.D.	5 mg/kg	
Hexabromodiphenyl ether	N.D.	5 mg/kg	
Heptabromodiphenyl ether	N.D.	5 mg/kg	
Octabromodiphenyl ether	N.D.	5 mg/kg	
Nonabromodiphenyl ether	N.D.	5 mg/kg	
Decabromodiphenyl ether	N.D.	5 mg/kg	

Test Report

Report No. A2230262860101014

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	014		
Phthalates (DBP, BBP, DEHP, DIBP)			
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL
	014	
Hexabromocyclododecane (HBCDD)	N.D.	20 mg/kg

Tested Item(s)	Result	MDL
	014	
Phthalates		
Di-2-propylheptyl phthalate (DPHpP) CAS#:53306-54-0*	N.D.	30 mg/kg

Sample/Part Description

No.	CTI Sample ID	Description
1	014	White wire jacket

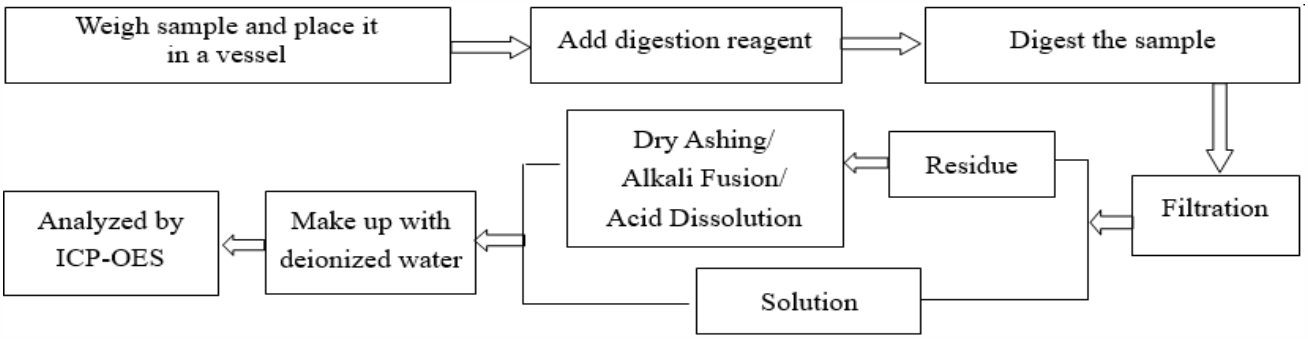
Remark: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million
-1000 mg/kg = 0.1%

Note: ***Indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.**

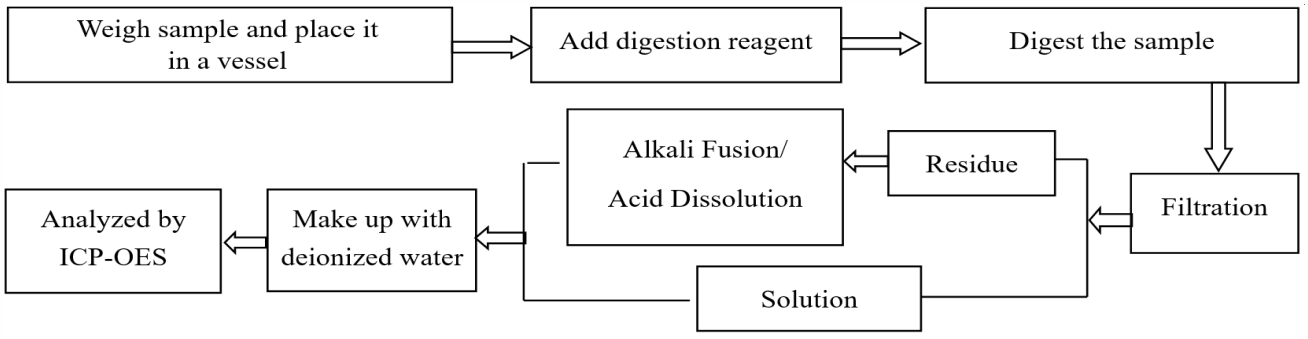
Test Report

Test Process

1. Lead (Pb), Cadmium (Cd), Chromium (Cr)

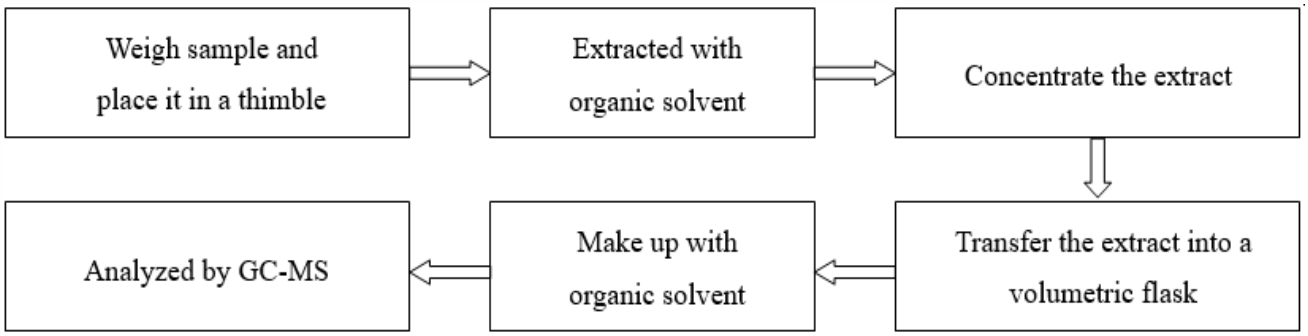


2. Mercury (Hg)

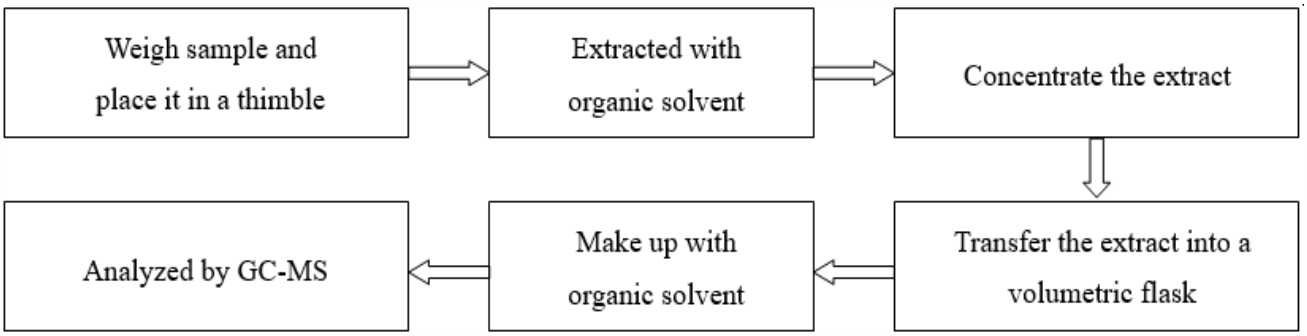


3. Hexavalent Chromium (Cr(VI))

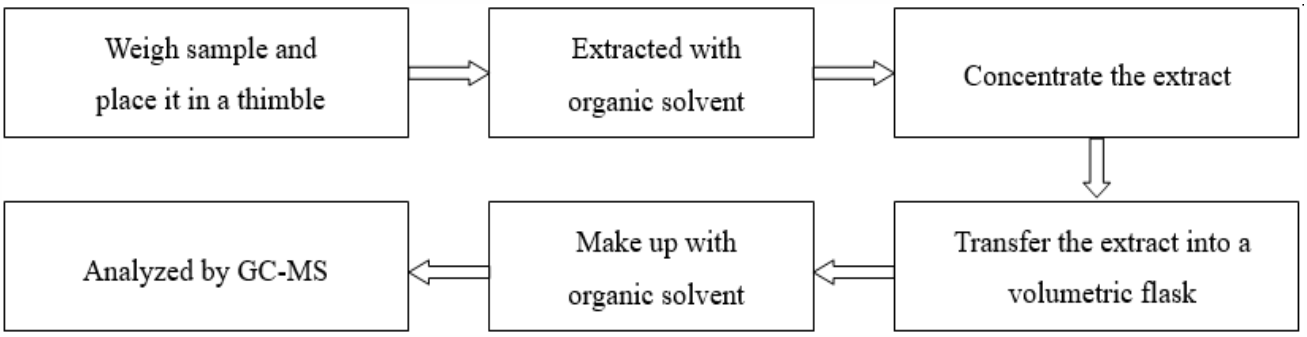
4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



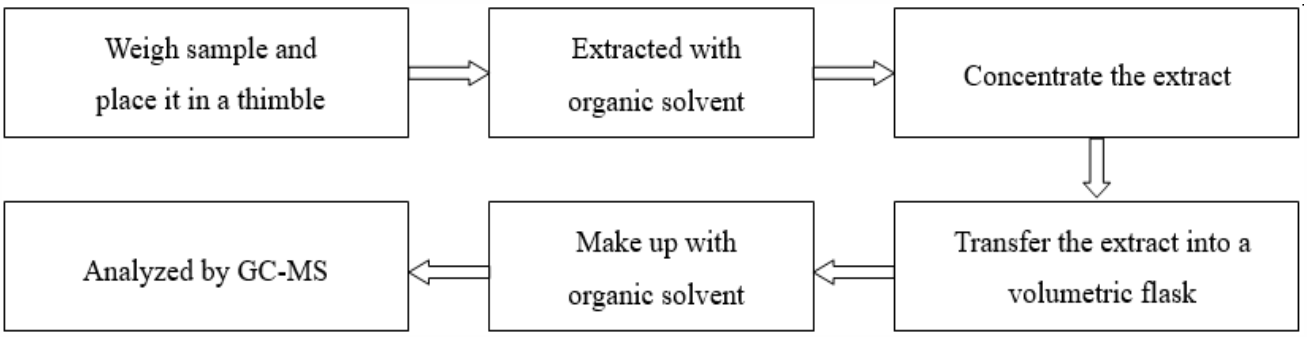
5. Phthalates (DBP, BBP, DEHP, DIBP)



6. Hexabromocyclododecane (HBCDD)



7. Phthalates



Test Report

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of report ***

Appendix

Client Reference Information

1007, 1061, 1095, 1571, 20276, 2468, 1015, 1617, 1672, 1185, 1533, 2464, 2547, 2517, 2854, 2835, 1430, 1431, 10272, 1032, 2651, 2661, 1569, 3443, 1028, 1685, 2103, 2661, 2920, 20080and FEIBIAO PVC LINE, CAR PVC LINE and rehearsal and line

Statement:

1. The Appendix Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
2. The Appendix Information is/are the supplement(s) for the Report A2230262860101014.