承　　認　　書

日期：2024.08.20

SPECIFICATION FOR APPROVAL

客戶名稱：
CUSTOMER：　鈺緯科技開發股份有限公司

料　　號：
PART NO：　**3KF00800536** (K1178)

品　　名：
ESCRIPTION：　**FFC Cable Ass'y**

■	RoHS環保產品(無鉛)
□	一般產品(含鉛)

本承認書內容若貴公司確認無誤，
懇請於下方承認欄內簽章寄回。

Please confirm your acceptance of this approval sheet by return fax.

承　認　欄

CONFIRMATION SIGNATURE

設計驗證
工程課
2024-08-20
發行
鈺緯科技開發股份有限公司

穩惠電子工業股份限公司
WEN TE ELECTRONICS CO.,LTD.
新北市中和區中山路二段327巷19號5樓
電話： 02-2240-2482　　傳真： 02-2248-0401
E-mail:Jackie@wentek.com.tw
東莞穩德電子有限公司
DONGGUAN WEN DE ELECTRONICS CO.,LTD
廣東省東莞市虎門鎮新聯高科技工業區高科二路88號
電話： 86-769-85509740　傳真： 86-769-85504618
E-Mail：wd@dgwender.com.cn

核准	審核	品管	製作
沈燕凌	林景杰	溫雁琳	呂宛樺
2024/8/20	2024/8/20	2024/8/20	2024/8/20
APPROVAL	穩惠電子工業股份有限公司 TEL:22402482 工程確認章		

	目录	文件编号:S04-FC0308

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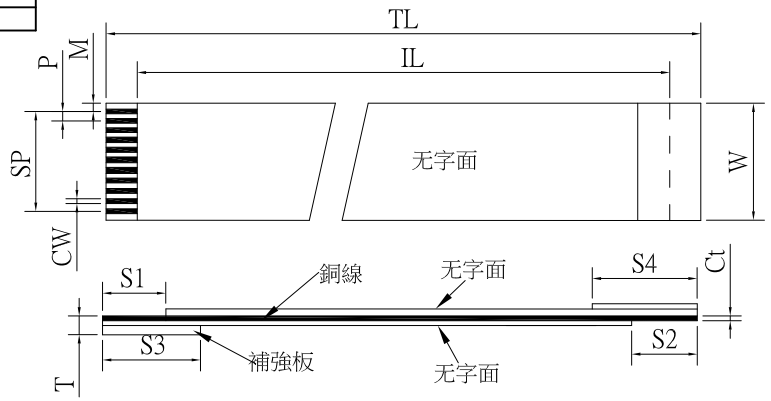
材料清单 Material List

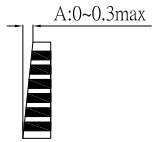
项次 No.	物品名称 Item name	料号 P/N	规格 Specifications	供应商 Supplier	备注 Note
1).	无印字白膜	QBW46XX-12001K1A	120*0.06	LEARY BALTRANS	(20861 105° 60V VW-1)
2).	镀锡铜线	M011CTX-06501K1A	0.05*0.65	CT/HK	
3).	蓝色补强板	Q1UB1XX+01214K1A	12*0.205	BALTRANS LEARY	

RoHS

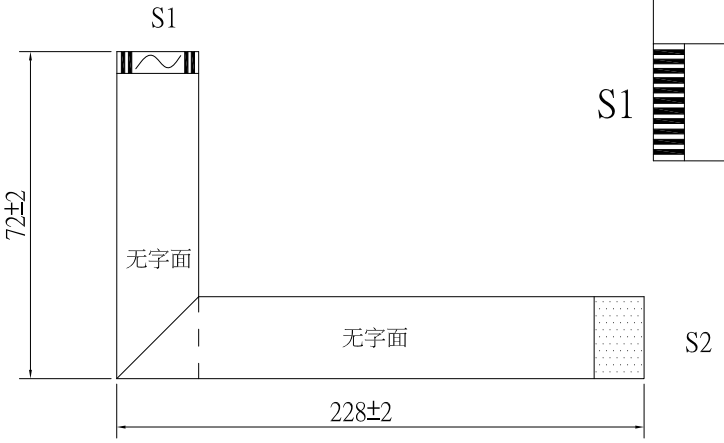
變更內容 ECN Content	變更日期 ECN DATE	ECO單號 ECO NO.

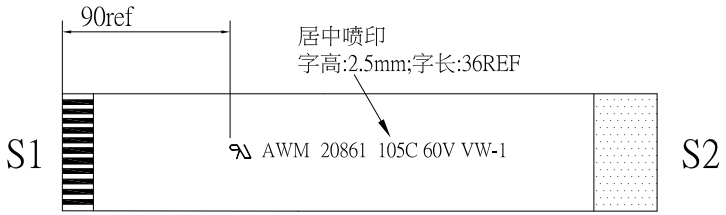
貼合規格:1.0*8*292*D 4/4/6/6(0.05*0.65);
貼合料號:F14D08X-29201K2A.





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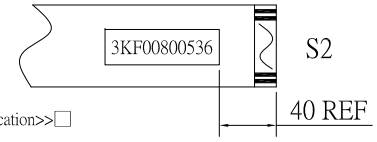




4*20白底黑字标签

3KF00800536

WEN TE
2024.08.20
Jackie



間距 Pitch	P	1.0	±0.1	
總間距 Span	SP	7	±0.1	
總寬度Width	W	9	+0.07 -0.12	
邊距Margin	M	1.0	±0.1	
端子厚度 Insert Thickness	T	0.3	±0.05	
裸銅長度 Strip Length	S1	4	±0.5	
	S2	4	±0.5	
補強板長度 Protector Length	S3	6	±1	
	S4	6	±1	
排線內長 Inside Length	IL	292	±2	
排線总長 Total Length	TL	300	±2	
銅線PIN數 No. of pin	8			
銅 線 Conductor	厚 度 Thickness	0.05	±0.005	
	寬 度 Width	0.65	±0.03	

注:標 〇 為重點尺寸
Note: 〇Important Inspection Dimension
GP要求:<<參照環境管理物質規范>>要求
GP Request:<<Refer to the envirdn mental manage material specification>>☐

承認單號 accept NO.	

穩 惠 電 子 工 業 股 份（東 莞）有 限 公 司
DONGGUAN WEN DE Electronic (Dongguan) CO., Ltd.

圖樣名稱:FFC Drawing Name:FFC	客戶名稱 : 鈺緯科技 Customer Name : DIVA	尺寸單位:mm Dimension Unit:mm	圖紙編號:FFC-P01- Drawing No.:FFC-P01-
穩惠料號 : F14D08A-29201K2A WenTek No. : F14D08A-29201K2A	客戶料號:3KF00800536 (K1178) Customer No.:3KF00800536	繪圖比例: SCALE:	版次:V1.0(ERP:A) REV:V1.0(ERP:A) 頁次:1/1 SHT:1of1
繪圖: Drawing: 校對: Proofreading: 審核: Checked: 批准: Approved:			日期:2024.08.19 Date:2024.08.19

FNAME REVDATE USER

6.特性:

类别 Distinction	项目 Test Item	特性值 Value	测试方法 Test Method
Electrical Character	Conductor Resistance	.Ref to attachment 1	JIS C-3102
	Insulation Resistance	≧100MΩ	Pitch(2.54;1.25;1.0;0.8)DC500V
		≧50MΩ	Pitch(0.5 0.4) DC250V
	Dielectric Strength	PASS	AC500V, 0.5mA,1Min.between conductors in the air AC1000V,0.5mA,1Min.between conductors in the water
Experiment	High temperature test	Insulation Resistance,normal	85℃96hrs
	Temperature Cycle test	Insulation Resistance,normal	→ 25℃,65%RH(2hrs) → -40℃,0%RH(4hrs) → 25℃,65%RH(4hrs) → 85℃,95%RH(4hrs) → 25℃,65%RH(2hrs) 5cycles
	High Humidity test	Insulation Resistance ,normal	40℃,95%RH,96hrs
	Flame test	30V(UL2896) 60V(UL20624) 60V(UL20861) 90V(UL20890) 300V(UL2643) 90V (UL21783)	UL VW-1
Durability Character	Flexing test	Bend test times≧100cycle	R0.5,180°,600g70cycle/min
		耐曲撓測試≧300,000cycle	R10*10cm，70cycle/min
	Abrasion test	≧100,000cycle	R0.5,600g，60cycle/min
銅線可焊性 Conductor Solderability	可焊性測試 Solderability test	The sarface of sn95%	speed15mm/sec,temperature250℃, dip depeh3mm ,dip time 4sec

Conductor Size (mm)	0.1 * 1.27	0.1 * 0.8	0.1 * 0.7	0.1 * 0.65	0.1 * 0.3	0.076 * 0.66	0.05 * 1.27	0.05 * 0.8	0.05 * 0.7	0.05 * 0.65	0.05 * 0.5	0.05 * 0.3	0.035 * 0.8	0.035 * 0.7	0.035 * 0.65	0.035 * 0.43	0.035 * 0.3
Conductor Resistance (ohm/M)	0.17	0.27	0.33	0.35	0.7	0.35	0.3	0.53	0.6	0.63	0.75	1.45	0.77	0.94	0.96	1.59	2.2

Table 1

Note：

The conductor of thickness is 0.1mm.Which is effected by material thickness.It's bending test≦ 50000cycle

The others conductor is according to the above list.

Storage Condition Temperature: -10~60℃;Humidity:30~50RH%

Quality Assurance Period: We can guarantee this tin plating Flexible Flat(FFC)for 3 months and gold electroplating Flexible Flat(FFC)for 3 months when Stored in normal condition

Operating temperatur range 0~60℃

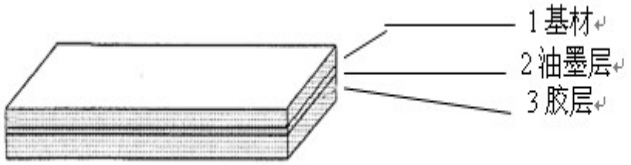
广东保昌新材料有限公司

材 质 证 明

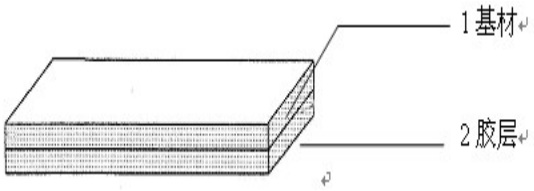
1、我司生产的热熔胶膜，主要由 PET、热熔胶层和印刷油墨组成。PET 主要用途是绝缘、油墨主要用途是印字、涂料主要用途是粘合、阻燃。

2、环保热熔胶膜符合 ROHS 法规要求。

环保印字热熔胶膜：



环保无印字热熔胶膜：



序号	品名	型号	PET 厚度(μm)	印刷字层(μm)	热融胶层厚度(μm)	涂料
1	环保无印字热熔胶膜	BCPR15-37	15	0	22	80℃ ROHS
2	环保印字热熔胶膜	BCPRZ15-37	15	1	21	80℃ ROHS
3	环保无印字热熔胶膜	BCPR19-43	19	0	24	80℃ ROHS
4	环保印字热熔胶膜	BCPRZ19-43	19	1	23	80℃ ROHS
5	环保无印字热熔胶膜	BCPR25-43	25	0	18	80℃ ROHS
6	环保印字热熔胶膜	BCPRZ25-43	25	1	17	80℃ ROHS
7	环保无印字热熔胶膜	BCPR25-50	25	0	25	80℃ ROHS
8	环保印字热熔胶膜	BCPRZ25-50	25	1	24	80℃ ROHS
9	环保无印字热熔胶膜	BCPR50-105	25	1	24	105℃ ROHS
10	环保印字热熔胶膜	BCPRZ50-105	25	0	35	105℃ ROHS
11	环保无印字热熔胶膜	BCPR25-60	25	0	35	80℃ ROHS
12	环保印字热熔胶膜	BCPRZ25-60	25	1	34	80℃ ROHS
13	环保无印字热熔胶膜	BCPR35-60	35	0	25	80℃ ROHS
14	环保印字热熔胶膜	BCPRZ35-60	35	1	24	80℃ ROHS
15	环保无印字热熔胶膜	BCPR50-80	50	0	30	80℃ ROHS
16	环保印字热熔胶膜	BCPRZ50-80	50	1	29	80℃ ROHS
17	环保无印字热熔胶膜	BCPR32-80	32	0	48	80℃ ROHS
18	环保印字热熔胶膜	BCPRZ32-80	32	1	47	80℃ ROHS
19	环保无印字热熔胶膜	BCPR25-70	25	0	45	80℃ ROHS
20	环保印字热熔胶膜	BCPRZ25-70	25	1	44	80℃ ROHS
21	环保无印字热熔胶膜	BCPR50-100	0	0	50	80℃ ROHS
22	环保印字热熔胶膜	BCPRZ50-100	50	1	49	80℃ ROHS
23	环保无印字热熔胶膜	BCPR43-105	19	0	24	105℃ ROHS
24	环保印字热熔胶膜	BCPRZ43-105	19	1	23	105℃ ROHS
25	环保无印字热熔胶膜	BCPR60-105	25	0	35	105℃ ROHS
26	环保印字热熔胶膜	BCPRZ60-105	25	1	34	105℃ ROHS
27	环保无印字热熔胶膜	BCPR80-105	50	0	30	105℃ ROHS
28	环保印字热熔胶膜	BCPRZ80-105	50	1	29	105℃ ROHS
29	环保无印字热熔胶膜	BCPR100-105	50	0	50	105℃ ROHS

30	环保印字热熔胶膜	BCPRZ100-105	50	1	49	105℃ ROHS
31	环保无印字热熔胶膜	BCPR90-105	50	0	50	105℃ ROHS
32	环保印字热熔胶膜	BCPRZ90-105	50	1	49	105℃ ROHS
33	环保无印字热熔胶膜	BCPR43-105（300V）	19	0	24	105℃ 300V ROHS
34	环保印字热熔胶膜	BCPRZ43-105（300V）	19	1	23	105℃ 300V ROHS
35	环保无印字热熔胶膜	BCPR60-105（300V）	25	0	35	105℃ 300V ROHS
36	环保印字热熔胶膜	BCPRZ60-105（300V）	25	1	34	105℃ 300V ROHS
37	环保无印字热熔胶膜	BCPR60-105Y	25	0	35	105℃ ROHS
38	环保印字热熔胶膜	BCPRZ60-105Y	25	1	34	105℃ ROHS
39	环保黑色无印字热熔胶膜	BCPRH15-37	15	0	22	黑膜 80℃ ROHS
40	环保黑底白字热熔胶膜	BCPRHZ15-37	15	1	21	黑膜 80℃ ROHS
41	环保黑色无印字热熔胶膜	BCPRH19-43	19	0	24	黑膜 80℃ ROHS
42	环保黑底白字热熔胶膜	BCPRHZ19-43	19	1	23	黑膜 80℃ ROHS
43	环保黑色无印字热熔胶膜	BCPRH25-60	25	0	35	黑膜 80℃ ROHS
44	环保黑底白字热熔胶膜	BCPRHZ25-60	25	1	34	黑膜 80℃ ROHS
45	环保黑色无印字热熔胶膜	BCPRH50-80	50	0	30	黑膜 80℃ ROHS
46	环保黑底白字热熔胶膜	BCPRHZ50-80	50	1	29	黑膜 80℃ ROHS
47	环保黑色无印字热熔胶膜	BCPRH32-80	32	0	48	黑膜 80℃ ROHS
48	环保黑底白字热熔胶膜	BCPRHZ32-80	32	1	47	黑膜 80℃ ROHS
49	环保黑色无印字热熔胶膜	BCPRH50-100	0	0	50	黑膜 80℃ ROHS
50	环保黑底白字热熔胶膜	BCPRHZ50-100	50	1	49	黑膜 80℃ ROHS
51	环保黑色无印字热熔胶膜	BCPRH43-105	19	0	24	黑膜 105℃ ROHS
52	环保黑底白字热熔胶膜	BCPRHZ43-105	19	1	23	黑膜 105℃ ROHS
53	环保黑色无印字热熔胶膜	BCPRH60-105	25	0	35	黑膜 105℃ ROHS
54	环保黑底白字热熔胶膜	BCPRHZ60-105	25	1	34	黑膜 105℃ ROHS
55	环保黑色无印字热熔胶膜	BCPRH80-105	50	0	30	黑膜 105℃ ROHS
56	环保黑底白字热熔胶膜	BCPRHZ80-105	50	1	29	黑膜 105℃ ROHS
57	环保黑色无印字热熔胶膜	BCPRH100-105	50	0	50	黑膜 105℃ ROHS
58	环保黑底白字热熔胶膜	BCPRHZ100-105	50	1	49	黑膜 105℃ ROHS
59	环保无印字热熔胶膜	BCPR80-105（300V）	32	0	48	105℃ 300V ROHS
60	环保黑色无印字热熔胶膜	BCPRH25-70	25	1	44	黑膜 80℃ ROHS
61	环保黑底白字热熔胶膜	BCPRHZ25-70	25	1	44	黑膜 80℃ ROHS
60	环保无印字热熔胶膜	BCPR12-37	12	0	25	80℃ ROHS
62	环保印字热熔胶膜	BCPRZ12-37	12	1	24	80℃ ROHS

制表：苏临风　　审核：冯青波

铜线压延规格技术参数表

CT/WI-032-ZJ

序号	品种	规格	宽度	厚度	抗张强度	拉力	电阻	延伸率	镀层	引用标准	备注
1	TW	0.05*0.65	±0.025	±0.005	≥15	≥0.49	≤0.62	≥20%	≥1um	依据客户参数	
2	BW	0.035*0.32	±0.025	±0.005	≥15	≥0.17	≤1.16	≥20%	N/A	依据客户参数	
3	TW	0.035*0.3	±0.02	±0.005	≥15	≥0.16	≤2.2	≥18%	≥1um	依据客户参数	
4	BW	0.035*0.3	±0.02	±0.005	≥15	≥0.16	≤1.79	≥20%	N/A	依据客户参数	
5	TW	0.07*0.1	±0.025	±0.005	≥15	≥1.1	≤0.28	≥20%	≥1um	依据客户参数	
6	BW	0.05*0.3	±0.025	±0.005	≥15	≥0.23	≤1.27	≥20%	N/A	依据客户参数	
7	BW	0.028*0.32	±0.025	±0.005	≥15	≥0.14	≤2.15	≥20%	N/A	依据客户参数	
8	BW	0.035*0.5	±0.025	±0.005	≥15	≥0.26	≤1.08	≥20%	N/A	依据客户参数	
9	BW	0.05*0.5	±0.025	±0.005	≥15	≥0.38	≤0.82	≥20%	N/A	依据客户参数	
10	TW	0.05*0.5	±0.025	±0.005	≥15	≥0.38	≤0.85	≥20%	≥1um	依据客户参数	
11	TW	0.035*0.65	±0.025	±0.005	≥15	≥0.34	≤0.88	≥20%	≥1um	依据客户参数	
12	TW	0.1*0.65	±0.025	±0.005	≥15	≥0.98	≤0.31	≥20%	≥1um	依据客户参数	
13	TW	0.1*0.8	±0.02	±0.005	≥15	≥1.2	≤0.27	≥20%	≥1um	依据客户参数	
14	TW	0.035*0.7	±0.025	±0.005	≥15	≥0.37	≤0.81	≥20%	≥1um	依据客户参数	
15	BW	0.035*0.7	±0.025	±0.005	≥15	≥0.37	≤0.94	≥18%	N/A	平角线检验标准	
16	TW	0.035*0.47	±0.025	±0.005	≥15	≥0.25	≤1.13	≥20%	≥1um	依据客户参数	
17	TW	0.05*0.7	±0.025	±0.005	≥15	≥0.53	≤0.57	≥20%	≥1um	依据客户参数	
18	TW	0.07*1.27	±0.03	±0.01	≥15	≥1.33	≤0.24	≥20%	≥1um	依据客户参数	
19	TW	0.1*0.7	±0.025	±0.005	≥15	≥1.1	≤0.28	≥18%	≥1um	依据客户参数	
20	DN	0.035*0.3	+0.01	±0.005	≥15	≥0.16	≤1.98	≥18%	≥1um	平角线检验标准	
21	BW	0.035*0.43	+0.01 /-0.03	±0.005	≥15	≥0.28	≤1.32	≥18%	≥1um	平角线检验标准	
22	BW	0.05*0.4	±0.025	±0.005	≥16	≥0.30	≤0.98	≥20%	N/A	依据客户参数	
23	BW	0.05/0.45	±0.025	±0.005	≥17	≥0.34	≤0.95	≥20%	N/A	依据客户参数	
24	BW	0.05/0.5	±0.025	±0.005	≥18	≥0.38	≤0.82	≥20%	N/A	依据客户参数	
25	BW	0.05*0.8	±0.03	±0.005	≥15	≥0.6	≤0.53	≥20%	N/A	样品承认书	
26	TW	0.05*0.8	±0.02	±0.005	≥15	≥0.6	≤0.53	≥20%	≥1um	样品承认书	
27	BW	0.05*1.3	±0.03	±0.005	≥15	≥0.98	≤0.36	≥20%	N/A	样品承认书	
28	TW	0.076*0.66	+0.01	±0.005	N/A	≥0.76	≤0.41	≥20%	≥1um	样品承认书	
29	TW	0.05*0.3	±0.025	±0.005	N/A	≥0.23	≤1.45	≥18%	≥1um	依据客户参数	
30	BW	0.035*0.27	±0.025	±0.005	N/A	≥0.14	≤2.2	≥20%		依据客户参数	
31	BW	0.035*0.26	±0.025	±0.005	N/A	≥0.14	≤2.4	≥20%		依据客户参数	
32	BW	0.05*0.65	±0.025	±0.005	N/A	≥0.49	≤0.62	≥20%		依据客户参数	
33	TW	0.05*1.3	+0.02 /-0.04	±0.005	N/A	≥0.98	≤0.33	≥20%		依据客户参数	
34	BW	0.05*0.47	±0.025	±0.005	N/A	≥0.35	≤0.92	≥20%		依据客户参数	
35	BW	0.07*2.2	+0.03 /-0.04	±0.005	N/A	≥2.31	≤0.13	≥20%		依据客户参数	
36	BW	0.05*0.26	±0.02	±0.005	N/A	N/A	≤1.48	≥18%		依据客户参数	
37	TW	0.1*0.6	±0.025	±0.005	N/A	N/A	≤0.37	≥20%		依据客户参数	

注：TW镀锡、BW裸铜、DN镀镍

制表：王晓漫　　审核：商明春

广东保昌新材料有限公司

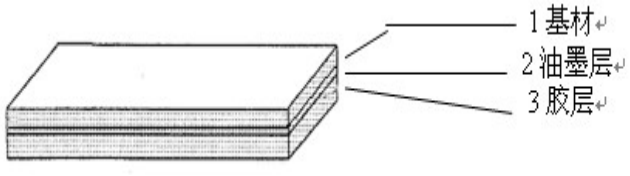
材质证明

1、我司生产的无卤补强板，主要由 PET、热融胶层和印刷油墨组成。PET 主要用途是绝缘、

油墨主要用途是印刷颜色、涂料主要用途是粘合。

2、无卤补强板符合卤素法规要求。

如下图视：



序号	品名	型号	PET 厚度 (μm)	印刷油墨厚度 (μm)	热融胶层厚度(μm)	涂料
1	无卤蓝色补强板	BCR75-100HF	75	1	24	无卤涂料
2	无卤蓝色补强板	BCR100-125 HF	100	1	24	无卤涂料
3	无卤蓝色补强板	BCR100-130 HF	100	1	29	无卤涂料
4	无卤蓝色补强板	BCR125-160 HF	125	1	34	无卤涂料
5	无卤蓝色补强板	BCR175-205 HF	175	1	29	无卤涂料
6	无卤蓝色补强板	BCR188-215 HF	188	1	26	无卤涂料
7	无卤蓝色补强板	BCR188-223HF	188	1	34	无卤涂料
8	无卤蓝色补强板	BCR188-225 HF	188	1	36	无卤涂料
9	无卤蓝色补强板	BCR188-240HF	188	1	51	无卤涂料
10	无卤蓝色补强板	BCR188-235HF	188	1	46	无卤涂料
11	无卤蓝色补强板	BCR215-250 HF	215	1	34	无卤涂料
12	无卤蓝色补强板	BCR250-282 HF	250	1	31	无卤涂料
13	无卤蓝色补强板	BCR250-295HF	250	1	44	无卤涂料
14	无卤透明补强板	BCRT75-100HF	75	1	24	无卤涂料
15	无卤透明补强板	BCRT100-125 HF	100	1	24	无卤涂料
16	无卤透明补强板	BCRT100-130 HF	100	1	29	无卤涂料
17	无卤透明补强板	BCRT125-160 HF	125	1	34	无卤涂料
18	无卤透明补强板	BCRT175-205 HF	175	1	29	无卤涂料
19	无卤透明补强板	BCRT188-215 HF	188	0	27	无卤涂料
20	无卤透明补强板	BCRT188-223HF	188	1	34	无卤涂料
21	无卤透明补强板	BCRT188-225 HF	188	1	36	无卤涂料
22	无卤透明补强板	BCRT188-240HF	188	1	51	无卤涂料
23	无卤透明补强板	BCRT188-235HF	188	1	46	无卤涂料
24	无卤透明补强板	BCRT215-250 HF	215	1	34	无卤涂料
25	无卤透明补强板	BCRT250-282 HF	250	1	31	无卤涂料
26	无卤透明补强板	BCRT250-295HF	250	1	44	无卤涂料
	无卤浅蓝色补强板	BCRQ75-100HF	75	1	24	无卤涂料
27	无卤浅蓝色补强板	BCRQ100-125 HF	100	1	24	无卤涂料

28	无卤浅蓝色补强板	BCRQ100-130 HF	100	1	29	无卤涂料
29	无卤浅蓝色补强板	BCRQ125-160 HF	125	1	34	无卤涂料
30	无卤浅蓝色补强板	BCRQ175-205 HF	175	1	29	无卤涂料
31	无卤浅蓝色补强板	BCRQ188-215 HF	188	1	26	无卤涂料
32	无卤浅蓝色补强板	BCRQ188-223HF	188	1	34	无卤涂料
33	无卤浅蓝色补强板	BCRQ188-225 HF	188	1	36	无卤涂料
34	无卤浅蓝色补强板	BCRQ188-240HF	188	1	51	无卤涂料
35	无卤浅蓝色补强板	BCRQ188-235HF	188	1	46	无卤涂料
36	无卤浅蓝色补强板	BCRQ215-250 HF	215	1	34	无卤涂料
37	无卤浅蓝色补强板	BCRQ250-282 HF	250	1	31	无卤涂料
38	无卤浅蓝色补强板	BCRQ250-295HF	250	1	44	无卤涂料
39	无卤白色补强板	BCRW75-100HF	75	1	24	无卤涂料
40	无卤白色补强板	BCRW100-125 HF	100	1	24	无卤涂料
41	无卤白色补强板	BCRW100-130 HF	100	1	29	无卤涂料
42	无卤白色补强板	BCRW125-160 HF	125	1	34	无卤涂料
43	无卤白色补强板	BCRW175-205 HF	175	1	29	无卤涂料
44	无卤白色补强板	BCRW188-215 HF	188	1	26	无卤涂料
45	无卤白色补强板	BCRW188-223HF	188	1	34	无卤涂料
46	无卤白色补强板	BCRW188-225 HF	188	1	36	无卤涂料
47	无卤白色补强板	BCRW188-240HF	188	1	51	无卤涂料
48	无卤白色补强板	BCRW188-235HF	188	1	46	无卤涂料
49	无卤白色补强板	BCRW215-250 HF	215	1	34	无卤涂料
50	无卤白色补强板	BCRW250-282 HF	250	1	31	无卤涂料
51	无卤白色补强板	BCRW250-295HF	250	1	44	无卤涂料
52	无卤白色补强板	BCRW188-233HF	188	1	44	无卤涂料
53	无卤透明补强板	BCRT188-233HF	188	1	44	无卤涂料
54	无卤蓝色补强板	BCR188-233HF	188	1	44	无卤涂料
55	无卤浅蓝色补强板	BCRQ188-233HF	188	1	44	无卤涂料

制表： 苏临风　　审核：冯青波

附件二:MSDS

Material Safety Data Sheet

Section 1. CHEMICAL PRODUCT&COMPANY INDENTIFICATION

Product name: BCPR15-37、BCPRZ15-37、BCPR19-43、BCPRZ19-43、BCPR25-43、BCPRZ25-43、BCPR25-50、BCPRZ25-50、BCPR50-105、BCPRZ50-105、BCPR25-60、BCPRZ25-60、BCPR32-60、BCPRZ32-60、BCPRZ25-70、BCPR25-70、BCPR50-80、BCPRZ50-80、BCPR32-80、BCPRZ32-80、BCPR50-90、BCPRZ50-90、BCPR50-92、BCPRZ50-92、BCPR50-100、BCPRZ50-100、BCPR43-105、BCPRZ43-105、BCPR60-105、BCPRZ60-105、BCPR80-105、BCPRZ80-105、BCPR100-105、BCPRZ100-105、BCPR90-105、BCPRZ90-105、

Chemical name: Thermal adhesive polyester film

Manufacturer: FOSHAN BAOCHANG NEW MATERIAL CO., LTD.

Address: NO.18, CHANGYE ROAD, XINJI INDUSTRIAL ZONE, HUAKOU, RONGGUI, SHUNDE DISTRICT, FOSHAN CITY

Emergency Telephone No:(86)757-29229463

Fax No: (86)0757-29229466

Section 2. COMPOSITION /INFORMATION

Components	WT.% (optional)	CAS NO
PET FILM LAYER		
Polyethylene terephthalate	30-35	25038-59-9
ADHESIVE LAYER		
Polyester adhesive	20-25	N/A
Bromide type flame retardant (Use FR material except for PBBS &PBDES	≤25	N/A
Antimony trioxide	≤5	1309-64-4
Silicone dioxide	≤5	N/A
Titanium dioxide	≤5	13463-67-7
The others	≤3	N/A

Section 3. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A Vapor Density: N/A

Specific gravity: N/A Solubility in water :Insoluble

Molecular weight: N/A Color: White and blue / green printing

Odor: No

Section 4. FIRE AND EXPLOSION HAZARD DATA

Flash Point (method used): N/A Flammable limits: Unknown

Extinguishing media: Dry Chemicals Foam CO_2 Water

Unusual Fire and Explosion Hazard: Keep away from fire sparks and open flame.

Section 5. FIRE-FIGHTING MEASURES

Extinguishing Media: Bubble Or Dry Powder

Section 6. Accidental Release Measure

Environmental precautions : N/A

Section 7. REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Strong ignition sources

Hazardous Decomposition Products: N/A

Hazardous Polymerization: Will not occur

Section 8. HEALTH HAZARD DATA

Exposure from routine use: No evidence of adverse effects from available information.

Inhalation: No data Ingestion: No data

Skin: No data Eyes: No data

Health Hazard: No data Chronic: No data

Medical Conditions Generally Aggravated By Exposure: No data

Emergency and First Aid Procedures:

Contact with skin: The film is not likely to be hazardous by skin contact but cleansing the skin after use us advisable.

Contact with eyes: Flush eyes with plenty of water.

Ingestion: No specific intervention is indicated film is not likely to be hazardous by ingestion. Consult a physician if necessary.

Section 9.HANDLING &STORAGE

Handlers are advised to wear safe gloves to avoid cuts from sharp edge of film .

Precautions to be taken in handling and storing: Keep away from fire sparks and open flame. Store in cool and dry area.

Section 10. EXPOSURE CONTROL &PERSONAL PROTECTION

Generally applicable control measure and precautions while no special controls or handling procedures are required.

It is recommended that exposure to any inhalable material be minimized by the use of adequate ventilation. Such as local exhaust. Effective containment and cleanness.

Eye/Face: Safety Glasses

Section 11. TOXICOLOGICAL INFORMATION

Polyethylene terephthalate is not a skin irritant. But is mild eye irritant.

Toxic effects from short exposures by inhalation resulted in no adverse effects.

Toxic effects from short exposures by ingestion resulted in no adverse effects.

Section 12. ECOLOGICAL INFORMATION

The information is not available. Toxicity is expected to be low based on insolubility in water.

Section 13. DISPOSAL INFORMATION

Waste disposal method: Incinerate or bury in a suitable land fill where permitted by appropriate government regulations.

Section 14. Transport Information

Transport regulations: Not long-term high-temperature environment in order to avoid failures.

Section 15. Regulatory Information

Applicable Regulations:N/A

Section 16. OTHER INFORMATION

Revision date:2018-7-3

-END OF MSDS-

FOSHAN BAOCHANG NEW MATERIAL CO., LTD.

安全数据表(SAFETYDATASHEET)

1．物品与厂商资料（Materials and manufacturer information)

物品名称：镀锡扁线
Item name:Tin-plated copper wire
物品编号：
Item number:
制造商或供货商名称/地址：泰州市常泰电子有限公司/江苏省泰州市高港区高新技术产业园区永盛路11号
Name/address of manufacturer or supplier:Taizhou Changtai Electronics Co.,Ltd/No.11,Yongsheng Raod, high tech Industrial Park, Taizhou City,Jiangsu
紧急联络电话/传真电话：TEL:0523-86119988 FAX :0523-86119988
Emergency contact number/fax number：TEL:0523-86119988 FAX :0523-86119988

2．成份辨识资料（Component identification data)

纯物质(Purity)：

中英文名称：铜 （Copper） 锡(Tin)
Chinese/English name:铜 （Copper） 锡(Tin)
同义名称：无
Synonym name:None
化学文摘社登记号码(CAS No.)：7440-50-8 7440-31-5
Registration no. of chemical abstracts society(CAS No.):7440-50-8 7440-31-5
危害物质成份(成份百分比)：Cu:98.21% Sn:1.79%
Hazardous substance component(Percentage)： Cu:98.21% Sn:1.79%

混合物(Compounds)：

化学性质:无
Chemical character:None
危害物质成份之中文名称：无
Chinese/English name of dangerous substance：None
浓度或浓度范围(成份百分比)：无
Concentration or concentration range (percentage) ：None
危害物质分类及图式：无
Classification of hazardous substance and picture：None

3．危害辨识资料（Hazardous identification information)

最重要危害与效应
Keyhazard effect
健康危害效应： 无
Health hazard effect:None
环境影响：无
Environmental effect:None
物理性及化学性危害：无
Hazardous of both physical and chemical:None
特殊危害：无.
Special damage:None



主要症状：无
Major symptoms:None
物品危害分类：无
Classification of dangerous commodity：None

4. 急救措施（First Aid Measures ）

不同暴露途径之急救方法 Emergent way to cure 吸入:无吸入之疑虑 Inhalation: No doubt about inhalation 皮肤接触:无 Skin:None 眼睛接触:无 Eyes:None 食入：无 Eat:None
最重要症状及危害效应：无
Primary important symptoms and hazardous effect:None
对急救人员之防护：无
The protection of first aid staff:None
对医生之提示：无
Prompt of medical professional:None

5. 灭火措施（Fire-fighting measures)

适用灭火剂：水、二氧化碳、泡沫灭火材、干粉灭火材
Appropriate Fire Extinguisher:Water, carbon dioxide, foam extinguishing materials, dry powder fire extinguishing materials
灭火时可能遭遇之特殊危害：燃烧会产生一氧化碳及二氧化硫
The special damage of extinguishing fire:Combustion produces carbon monoxide and sulfur dioxide
特殊灭火程序：无
Special fire-fighting procedure:None
消防人员之特殊防护装备：须配戴氧气罩
Special protecting equipments of fire-fighters:Wear an oxygen mask

6. 泄漏处理方法

个人应处理事项：无
Personal attention:None
环境注意事项：无
Environmental attention:None
清理方法：无
Methods of clearance:None

7. 安全处置与储存方法（Safety handling and method of storage)

处置：铜导体应注意电源隔离，当发生火灾时应及时将导体旁边的电源切断。
Disposal:Copper conductor should pay attention to the power supply isolation, when a fire should be in time to cut off the power supply.
储存：由于铜导电性优、暴露在空气中会变色、在湿空气中表面变成绿色的碱式碳酸盐，故在储存时必须选择远离电源，对铜导体进行严密包装，存放在温湿度相对干燥的一些环境，一般相对湿度在：≤65%，温度18-27°。
Storage:because copper conductive, exposed to the air will change color, in wet surface into a green alkali carbonate in the air, so must choose to stay away from the power supply, when stored on copper conductor closely packed, stored in a temperature and humidity relatively dry environment,General relative humidity is: no more than 65%, temperature 18-27.

8. 暴露预防措施（exposure and prevention measure)

工程控制：无
Engineer controlling:None
控制参数：八小时日时量平均容许浓度/短时间时量平均容许浓度/最高容许浓度:N/A
Controlling parameter:Average allowable concentration/maximum allowable concentration/maximum allowable concentration: N/A
个人防护设备 • 呼吸保护:无 • 手保护:无 • 眼睛保护:无 • 皮肤和身体保护:无
Personal protective equipment • Breath protection:None • Hands protection:None • Eyes protection:None • Skin and physical protection:None
卫生措施：无
Healthy measures:None

9. 物理及化学性质（Physical and chemical properties)

物质状态：固态	形状：无
State of materials:	Shape:None
颜色：银灰色	气味：无
Color: silver gray	Odor: None
PH值：无	溶点：铜（1063°C）锡（231.6°C）
PH data:None	Melting point: Copper（1063°C) Tin(231.6°C)
自然温度：无	闪火点：无
Natural temperatureNone	Spark point: None
密度：铜（8.89）锡（7.298）	水中溶解度：无
Density: Copper（8.89）Tin（7.298）	Solubility: None

10. 安定性及反应性(Stability and reactivity)

安定性：安定
Stability：stability
特殊状况下可能之危害反应：通电后对动物会有触电反应及生命危害
Potential hazardous effect under special situation:After electricity, there will be electric shock and life damage to animals
应避免之状况：裸露直接与电源接触，应避免放置在180°C以上的地方储存
Situation which you should avoid:Bare direct contact with the power source should be avoided in the area where above 180°Cis stored.
应避免之物质：与稀硝酸、热浓硫酸、热浓氢溴酸、乙酸或其它有机酸反应
Substance which you should avoid:Reaction with dilute nitric acid, hot concentrated sulfuric acid, hydrobromic acid, acetic acid or other organic acids.
危害分解物：无
Hazardous decomposer:None

11. 毒性资料（Hazards data)

急毒性：无
Toxicity:None
局部效应：无
Local effect:None
致敏感性：无
Sensitivity:None
慢毒性或长期毒性：无
Toxicity both of long term and short term:None
特殊效应：无
Special effect:None

12. 生态资料（Ecological data)

可能之环境影响/环境流布:无
Possible impact on environment:None

13. 废弃处置方法（Disposal methods of waste material)

废弃处置方法:废弃之铜线交由冶炼厂回收利用。
Disposal methods of waste material:The abandoned copper wire is to be recycled by smelter.

14. 运送资料（Shipping data)

国际运送规定：无
International shipping regulation:None
联合国编号：无
United nation number:None
国内运输规定：无
National shipping regulation:None
特殊运送方法及注意事项：无
Special shipping method and instructions:None

15. 法规资料（Regulation information）

适用法规：无
Regulations:None

16. 其它资料(Other data)

参考文献	无
Referencedocument	None
制表者单位 Manufacturer	名称：泰州市常泰电子有限公司
	Name:Taizhou Changtzi Electronics Co.,Ltd
	地址/电话：江苏省泰州市高港区高新技术产业园区永盛路11号/0523-86119988
	Address/TEL:No.11,Yongsheng Raod, high tech Industrial Park, Taizhou City,Jiangsu/0523-86119988
制表人	王晓漫
Prepared by	Xiaoman Wang
制表日期	2020.01.06
Prepared date	January 06, 2020

附件二:MSDS

材料安全数据表

Material Safety Data Sheet

第 1 条：化工产品及公司的鉴定

Section 1.：CHEMICAL PRODUCT&COMPANY INDENTIFICATION

Product name: BCR75-100、BCR100-130、BCR125-160、BCR175-205、BCR150-183、BCR188-225、BCR215-250、BCR250-282

品名：无卤补强板

Chemical name:Halogen-free reinforcing plate

公司名称：佛山市保昌新材料有限公司

Manufacturer: FOSHAN BAOCHANG NEW MATERIAL CO., LTD.

地址：佛山市顺德区容桂华口新基工业区昌业路 18 号

Address:NO.18, CHANGYE ROAD, XINJI INDUSTRIAL ZONE, HUAKOU, RONGGUI, SHUNDE DISTRICT, FOSHAN CITY

Emergency Telephone

No:(86)757-29229463 Fax No: (86)0757-29229466

Section 2. COMPOSITION /INFORMATION

Components	WT.% (optional)	CAS NO
PET FILM LAYER		
Polyethylene terephthalate	60-70	25038-59-9
ADHESIVE LAYER		
Polyester adhesive	≥30	N/A
Titanium dioxide	≤5	13463-67-7

Section 3. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A Vapor Density: N/A

Specific gravity: N/A Solubility in water :Insoluble

Molecular weight: N/A Color: Blue

Odor: No

Section 4. FIRE AND EXPLOSION HAZARD DATA

Flash Point (method used): N/A Flammable limits: Unknown

Extinguishing media: Dry Chemicals Foam CO_2 Water

Unusual Fire and Explosion Hazard: Keep away from fire sparks and open flame.

Section 5. FIRE-FIGHTING MEASURES

Extinguishing Media: Bubble Or Dry Powder

Section 6. Accidental Release Measure

Environmental precautions : N/A

Section 7. REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Strong ignition sources
Hazardous Decomposition Products: N/A
Hazardous Polymerization: Will not occur
Section 8. HEALTH HAZARD DATA
Exposure from routine use: No evidence of adverse effects from available information.
Inhalation: No data Ingestion: No data
Skin: No data Eyes: No data
Health Hazard: No data Chronic: No data
Medical Conditions Generally Aggravated By Exposure: No data
Emergency and First Aid Procedures:
Contact with skin: The film is not likely to be hazardous by skin contact but cleansing the skin after use us advisable.
Contact with eyes: Flush eyes with plenty of water.
Ingestion: No specific intervention is indicated film is not likely to be hazardous by ingestion. Consult a physician if necessary.
Section 9.HANDLING &STORAGE
Handlers are advised to wear safe gloves to avoid cuts from sharp edge of film .
Precautions to be taken in handling and storing: Keep away from fire sparks and open flame. Store in cool and dry area.
Section 10. EXPOSURE CONTROL &PERSONAL PROTECTION
Generally applicable control measure and precautions while no special controls or handling procedures are required.
It is recommended that exposure to any inhalable material be minimized by the use of adequate ventilation. Such as local exhaust. Effective containment and cleanness.
Eye/Face: Safety Glasses
Section 11. TOXICOLOGICAL INFORMATION
Polyethylene terephthalate is not a skin irritant. But is mild eye irritant.
Toxic effects from short exposures by inhalation resulted in no adverse effects.
Toxic effects from short exposures by ingestion resulted in no adverse effects.
Section 12. ECOLOGICAL INFORMATION
The information is not available. Toxicity is expected to be low based on insolubility in water.
Section 13. DISPOSAL INFORMATION
Waste disposal method: Incinerate or bury in a suitable land fill where permitted by appropriate government regulations.
Section 14. Transport Information
Transport regulations: Not long-term high-temperature environment in order to avoid failures.
Section 15. Regulatory Information
Applicable Regulations:N/A
Section 16. OTHER INFORMATION
Revision date: 2016-3-3

-END OF MSDS-

SAFETY DATA SHEET

1 IDENTIFICATION

Product name	:1119K
Name of company	:Hitachi Industrial Equipment Systems Co., Ltd
Address	:1-1,Higashitaga-cho 1-chome, Hitachi-shi, Ibaraki-ken, Japan
Tel	:+81-294-36-8682
Fax	:+81-294-36-8975
Recommended use of the chemical and restrictions on use	:Printing Ink for industrial Marking

2 HAZARDS IDENTIFICATION

Physico-chemical endpoints	: Flammable liquid Category 2
Acute toxicity - oral	: Category 5
Acute toxicity - dermal	: Not available
Acute toxicity - inhalation（air）	: Not identified
Acute toxicity - inhalation（vapors）	: Category 5
Acute toxicity - inhalation（dust, mist）	: Not identified
Skin corrosion/irritation	: Category 2
Eye damage/irritation	: Category 2
Sensitization - respiratory	: Not identified
Sensitization - skin	: Not available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not identified
Toxic to reproduction	: Category 1
Effects on or via lactation	: Not identified
Specific target organ systemic toxicity	: (Single exposure) Category 1 Central nervous system Category 2 Kidney Category 3 Respiratory tract irritation :(Repeated exposure) Category 1 Central nervous system Category 1 Peripheral nervous system
Aspiration toxicity	: Category 2
Hazardous to the aquatic environment	
-Acute hazard	: Not available
-Chronic hazard	: Not available

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GHS label elements

Hazard symbols:



Signal word: Danger

Hazard statement and precautionary statement:

- Highly flammable liquid and vapor
- May be harmful if swallowed
- May be harmful if inhaled
- Causes skin irritation
- Causes serious eye irritation
- May damage fertility or the unborn child
- Causes damage to central nervous system-single exposure
- May cause damage to kidney-single exposure
- May cause damage to airway irritant-single exposure
- Causes damage to central nervous system and peripheral nervous system through prolonged or repeated exposure
- May be harmful if swallowed and enters airways

Precautionary statements:

- Keep out of reach of children. Read label before use. If medical advice is needed: Have product container or label at hand.

Prevention:

- Keep away from ignition sources such as heat/sparks/open flame– No smoking.
- Take precautionary measures against static discharge.
- Wear protective gloves and eye/face protection as specified by the competent authority.
- Do not breathe dust/mist/vapors.
- Use only in a well-ventilated area. Call a doctor/physician if you feel unwell.
- Do not eat, drink or smoke when using this product.
- Avoid contact during pregnancy/while nursing.
- Wash hands thoroughly after handling.

Response:

- In case of fire, use dry chemical, CO_2, water splay (fog) or form for extinction.
- IF SWALLOWED: Call a doctor/physician if you feel unwell. Rinse mouth.
- IF ON SKIN: Gently wash with plenty of soap and water.
- Wash/Decontaminate removed clothing before reuse.
- If skin irritation occurs, seek medical advice/attention.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.
- Collect spillage.

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Storage:
- Store in cool/well-ventilated place. Store locked up.
- Call a doctor/physician if exposed or you feel unwell.

Disposal:
- Waste must be disposed of according to applicable regulations.

3 Composition/information on ingredients

Substance or mixture; mixture
Composition:

Chemical name	concentration (%)	CAS number
2-butanone	80-90	78-93-3
ChromeⅢ-Complex Dye	5-15	TSCA Registered
Toluene	0.1-1	108-88-3

4 First-aid measures

Inhalation;
Remove the victim from the contamination immediately to fresh air. Keep the victim warm and quiet and arrange for transport to the neatest medical facility for examination and treatment by a physician as soon as possible.

Skin contact;
Remove all contaminated clothing, shoes and socks from the affected areas as quickly as possible. Wash the affected area under running water using a mild soap. If irritation persists, arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

Eye contact;
Gently rinse the affected eyes with clean water for at least 15 minutes. Remove contact lenses if easily possible. and refer for medical attention.

Ingestion;
Never give anything by mouth to someone who is unconscious or convulsing. If the victim is responsive, give him one or two glasses of water. And refer for medical attention.

5 Fire-fighting measures

Suitable extinguishing media;
Use dry chemical, CO_2, water splay (fog) or form.

Fire fighting procedures;
Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors.
Avoid spraying water directly into storage containers due to danger of boil over.

Unusual fire/explosion hazard;
Flammable liquid, can release vapors that form flammable mixtures at temperatures at or above the flashpoint.

Special protective equipment and precautions for fire fighters;

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Fire fighters should wear boots, overalls, gloves, eye and face protection and breathing apparatus.

6 Accidental release measures

Shut off all sources of ignition; No smoking or flames in area. Absorb spill with inert material (e.g., dry sand or earth), then place in closed containers using non-sparking tools. Flush residual spill (area) with copious amounts of water.

7 Handling and storage

Handling;

Use only in the well-ventilated areas.
Make available in the work area emergency shower and eyes wash.
Avoid contact with skin or eyes.

Storage;

Close up the container and keep it in dark cool(0~20℃) place.
Keep away from combustible materials and sources of ignition.

8 Exposure controls/personal protection

Exposure guidelines:

ACGIH TLV-TWA (ppm)

2-butanone	200
ChromeⅢ-Complex Dye	:None known
Toluene	:20(skin)

ACGIH STEL(ppm)

2-butanone	300
ChromeⅢ-Complex Dye	:None known
Toluene	:No data

9 Physical and chemical properties

Appearance	
Physical state	:Liquid
Color	:Black
Odor	:Solvent odor
Boiling point[2)]	:80℃
Flash point	:-4.1℃（closed cup）
Upper/lower flammability or explosive limits[2)]	:Lower 1.7 vol%、Upper 11.4 vol%
Vapor pressure[2)]	:9.5kPa (20℃)
Vapor density (Air＝1)[2)]	:2.41 （2-butanone）
Relative density	:0.85(20℃)
Solubility（Water）[2)]	:29g/100mL (20℃)（2-butanone）
Partition coefficient: n-octanol/water[2)]	:0.29（2-butanone）
Auto-ignition temperature[2)]	:505℃
Decomposition temperature	:No data

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10 Stability and reactivity

Stability: The product is stable.
Conditions and materials to avoid: Not available
Hazardous decomposition products: These products are carbon oxides

11 Toxicological information

Acute toxicity:

2-butanone
LD50(orl,rat): 2737mg/kg(TXAPA9 19, 699, 1971)
LCLo(ihl,rat): 23500mg/㎥/8h(AIHAAP 20, 364, 1959)
LD50(skin,rabbit): 6480mg/kg(SHELL* MSDS-5390-4)
TCLo(ihl,human): 1000mg/㎥(VCVGK* -, 417, 1994)
LDLo(orl,human): 714.3mg/kg(VCVGK* -, 417, 1994)

ChromeⅢ-Complex Dye
Oral >5000（Rat LD50（mg/kg））
Dermal >2000（Rat LD50（mg/kg））
Inhalation None known

Toluene
LD50(orl,rat): 636mg/kg(NRTXDN 2, 567, 1981)
LC50(ihl,rat): 49mg/㎥/4h(GTPZAB 32810), 23, 1988)
LD50(skin,rabbit): 14100μL/kg(AIHAAP 30, 470, 1969)
TCLo(ihl,human): 750mg/㎥/8h(VCVGH* -, 144, 1990)
LD50(orl,rat): 2.600, 5.500, 5.580, 5.900, 6.400, 7.000, 7.530mg/kg(EU-RAR No.30, 2003)
LD50(orl,rat): 4,800mg/kg(Calculate)
LC50(ihl,rat): 12.5, 28.1, 28.8, 33mg/㎥/4h(EU-RAR No.30, 2003)
LC50(ihl,rat): 18mg/㎥/4h = 4.800ppm(Calculate)

Skin corrosion/irritation:

2-butanone
Skin; rabbit; 402mg/24h; Mild(TXAPA9 19, 276, 1971)

ChromeⅢ-Complex Dye
No（Rabbit test-OECD404 1981）

Toluene
Skin; rabbit; 20mg/24h; Moderate(85JCAE -, 29, 1986)

Serious eye damage/irritation:

2-butanone
Eye; rabbit; 80mg(TXAPA9 19, 276, 1971)

ChromeⅢ-Complex Dye
No（Rabbit test-84/449/EEC B.5）

Toluene
rabbit; ; Moderate(EU-RAR No.30, 2003)

Respiratory or skin sensitization:

2-butanone
Not available

ChromeⅢ-Complex Dye
No（Giunea pig test-84/449/EC B.6）

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Toluene
Not available

Germ cell mutagenicity:
2-butanone
Reverse mutation assay in S.typhimuriun and E.coli; Negative
Sex chromosome loss and nondisjunction; S.cerevisiae; 33800ppm(MUREAV 149, 339, 1985)
ChromeⅢ-Complex Dye
None known
Toluene
Micronucleus test; mouse; ipr; 433μg/kg/24h(ARTODN 58, 106, 1985)
Sister chromatid exchange; human; ihl; 252μg/L/19Y(MUREAV 519, 171, 2002)

Carcinogenicity:
2-butanone
Not available
ChromeⅢ-Complex Dye
None known
Toluene
Not available

Reproductive toxicity:
2-butanone
TCLo(ihl,rat): 2900mg/m^3(female 6-10 D preg); Specific Developmental Abnormalities - craniofacial(VCVGK* -, 418, 1994)
ChromeⅢ-Complex Dye
None known
Toluene
TDLo(orl,rat): 16mL/kg(6-21 D preg); Effects on Newborn - phisycal(REPEBL 47, 362, 2000)
TCLo(ihl,rat): 1800ppm(7-20 D preg); Specific Developmental Abnormalities - Central Nervous System(ARTODN 75, 103, 2002)
Human; "the study suggests an increased risk

STOST-single exposure:
2-butanone
The influence of the central nervous system, rat/mouse(EHC 143, 1992; PATTY 4th, 1994; IRIS 2003)
The influence of kidny, oral, rat(DFGOT vol 12,1999; IRIS 2003; ATSDR 1992)
The respiratory tract irritation, human (ACGIH 7th, 2001; DFGOT vol 12,1999; PATTY 4th, 1994; ATSDR 1992)
ChromeⅢ-Complex Dye
None known
Toluene
Human; ihl, 50-100ppm, feebleness, sleepiness, dizziness(CERI hazard sheet, 96-4,1997)
Human; ihl, 200-400ppm, paresthesia, vomiturition(CERI hazard sheet, 96-4,1997)
Human; ihl, 500-800ppm, drunkenness, derangement, gait abonormality(CERI hazard sheet, 96-4,1997)
Human: irritation for eye, nose and throat(EU-RAR No.30, 2003)

STOST-repeated exposure:
2-butanone

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The sensory paralysis of hand and arm, human(EHC 143, 1992; DFGOT vol 12, 1999; IRIS 2003)
The damage of central nervous system, human(DFGOT vol 12, 1999; IRIS 2003)

Chrome Ⅲ-Complex Dye
None known

Toluene
Human; ihl, stenosis for range of vision, headache with deafness and eye nystagmus, trembling, dynamic ataxia, amnesia, cerebral atrophy, renal dysfunction(CERI hazard sheet, 96-4,1997)
Human; The increasing of SGOT, hepatotoxicity with the adipose degene

Aspiration hazard:

2-butanone
Not available

Chrome Ⅲ-Complex Dye
None known

Toluene
Not available

12 Ecological information

Ecotoxicity[1)]:

2-butanone
mosquito fish(96h-LC50(mg/L)):5600
daphnids(48h-LC50(g/L)):>1000

Chrome Ⅲ-Complex Dye
Oral >5000（Rat LD50（mg/kg））
Dermal >2000（Rat LD50（mg/kg））
Inhalation None known

Toluene
LD50(orl,rat): 636mg/kg(NRTXDN 2, 567, 1981)
LC50(ihl,rat): 49mg/㎥/4h(GTPZAB 32810), 23, 1988)
LD50(skin,rabbit): 14100μL/kg(AIHAAP 30, 470, 1969)
TCLo(ihl,human): 750mg/㎥/8h(VCVGH* -, 144, 1990)
LD50(orl,rat): 2.600, 5.500, 5.580, 5.900, 6.400, 7.000, 7. 530mg/kg(EU-RAR No.30, 2003)
LD50(orl,rat): 4,800mg/kg(Calculate)
LC50(ihl,rat): 12.5, 28.1, 28.8, 33mg/㎥/4h(EU-RAR No.30, 2003)
LC50(ihl,rat): 18mg/㎥/4h = 4.800ppm(Calculate)

Persistence and degradability:

2-butanone
Not available

Chrome Ⅲ-Complex Dye
None known

Toluene
This material is biodegradable.

Bioaccumulative potential:

2-butanone
Not available

Chrome Ⅲ-Complex Dye
None known

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Toluene
Not available

Mobility in soil:
2-butanone
Not available
ChromeⅢ-Complex Dye
None known
Toluene
Not available

13 Disposal considerations

Scrap materials may be disposed by licensed contractor or burned in an approved incinerator.
Do not dump into sewer, on the ground or into any body of water.
Follow national and local regulations.

14 Transport information

Follow all regulations in your country.

UN Number	1210
UN Proper Shipping Name	:Printing ink, flammable
Transport hazard class	:Class 3(Flammable liquid)
Packing Group	:Ⅱ
Environmental hazards	:No

15 Regulatory information

Follow all regulations in your country.
Content of RoHS Directive material Cd<100ppm Pb, Hg, Hexavalent Cr, PBB, PBDE<1000ppm

16 References

1) Results of Eco-toxicity tests of chemicals conducted by Ministry of the Environment in Japan
2) International Chemical Safety Cards

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Test Report

Report No. A2240032101101001 Page 1 of 9

Company Name shown on Report	GUANGDONG BALTRANS NEW MATERIAL CO.,LTD/FOSHAN CITY BAOCHANGXINCAILIAO CO.,LTD
Address	NO.14 FUAN EAST ROAD,SHUIBU TOWN.TAISHAN CITY,GUANGDONG 529200 CHINA/NO 18CHANGYE RD HUAKOUXINJI INDUSTRIAL ZONE RONGGUI TOWNSHUNDE FOSHAN,GUANGDONG 528305 CHINA

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

Sample Name	Environment friendly hot melt adhesive film
Part No.	BCPR60-105
Sample Received Date	Jan. 16, 2024
Testing Period	Jan. 16, 2024 to Jan. 24, 2024

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,Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS) in the submitted sample(s).
Test Method/Test Result(s)	Please refer to the following page(s).

Approved by: Wenjun Wang Date: Jan. 24, 2024

Wenjun Wang
Lab Authorized Signatory

No. R229111430

Test Report

****

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.

Test Report

Test Method

Tested 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
Perfluorooctanoic Acid(PFOA)*	Refer to US EPA 3550C:2007 & US EPA 8321B:2007	LC-MS-MS
Perfluorooctane Sulfonates(PFOS)*	Refer to US EPA 3550C:2007 & US EPA 8321B:2007	LC-MS-MS

Test Result(s)

Tested Item(s)	**Result**	**MDL**	**Limit**
	001		
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**
	001		
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	

Test Report

Tested Item(s)	Result	MDL	Limit
	001		
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	

Tested Item(s)	Result	MDL	Limit
	001		
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
	001	
Hexabromocyclododecane (HBCDD)*	N.D.	5 mg/kg

Test Report

Tested Item(s)	Result	MDL
	001	
Phthalates*		
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	30 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	30 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	30 mg/kg
Di-n-octyl phthalate (DNOP) CAS#:117-84-0	N.D.	30 mg/kg
Di-isononyl phthalate (DINP) CAS#:28553-12-0,68515-48-0	N.D.	50 mg/kg
Di-iso-decyl phthalate (DIDP) CAS#:26761-40-0,68515-49-1	N.D.	50 mg/kg
Dimethyl phthalate (DMP) CAS#:131-11-3	N.D.	30 mg/kg
Diethyl phthalate (DEP) CAS#:84-66-2	N.D.	30 mg/kg
Dipropyl phthalate (DPrP) CAS#:131-16-8	N.D.	30 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	30 mg/kg
Dipentyl phthalate (DPP/DPENP) CAS#:131-18-0	N.D.	30 mg/kg
Dicyclohexyl phthalate (DCHP) CAS#:84-61-7	N.D.	30 mg/kg
Diisooctyl phthalate (DIOP) CAS#:27554-26-3	N.D.	50 mg/kg
Dinonyl phthalate (DNP) CAS#:84-76-4	N.D.	30 mg/kg
Di-n-hexyl phthalate (DNHP/DHEXP) CAS#:84-75-3	N.D.	30 mg/kg
Dibenzyl phthalate (DBzP) CAS#:523-31-9	N.D.	30 mg/kg
Diphenyl phthalate (DPhP) CAS#:84-62-8	N.D.	30 mg/kg

Test Report

Tested Item(s)	Result	MDL
	001	
Perfluorooctanoic Acid (PFOA) *	N.D.	0.010 mg/kg

Tested Item(s)	Result	MDL
	001	
Perfluorooctane Sulfonates (PFOS) *	N.D.	0.010 mg/kg

Sample/Part Description

No.	CTI Sample ID	Description
1	001	White plastic film

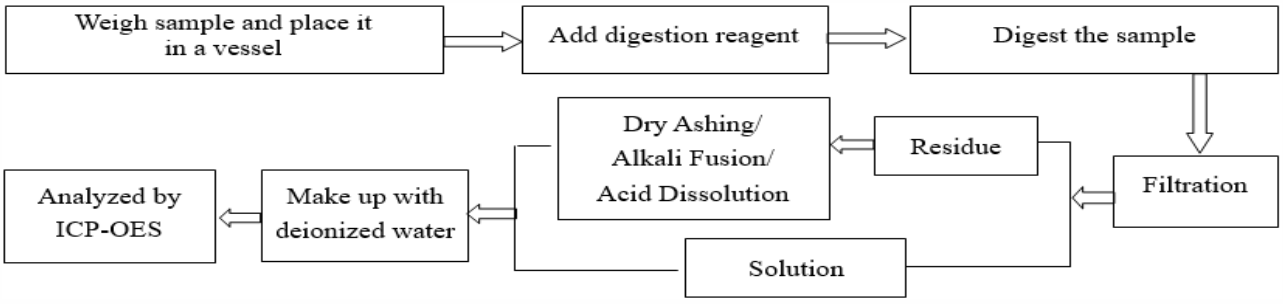
Remark: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million
-1000 mg/kg = 0.1%

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

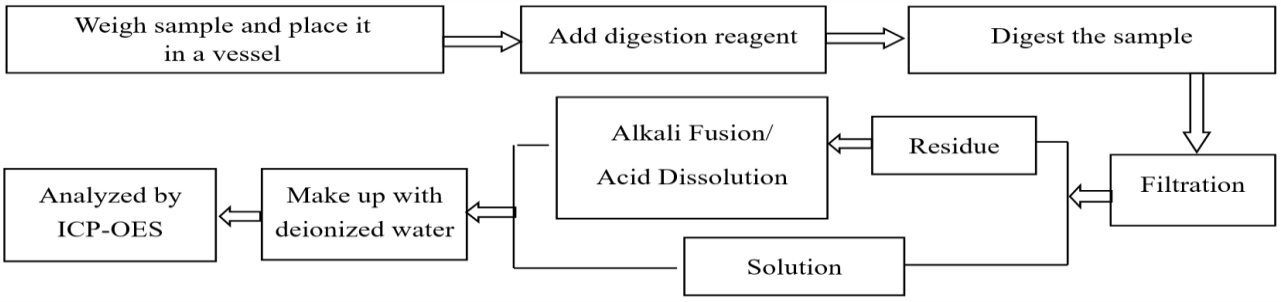
Test Report

Test Process

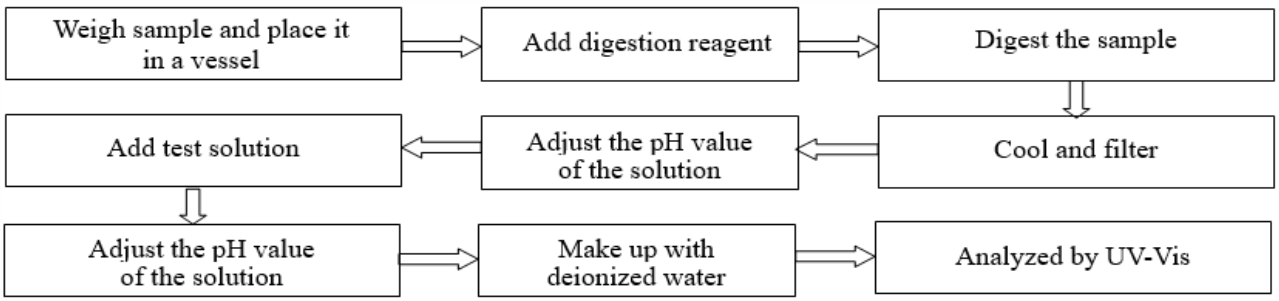
1. Lead (Pb), Cadmium (Cd), Chromium(Cr)



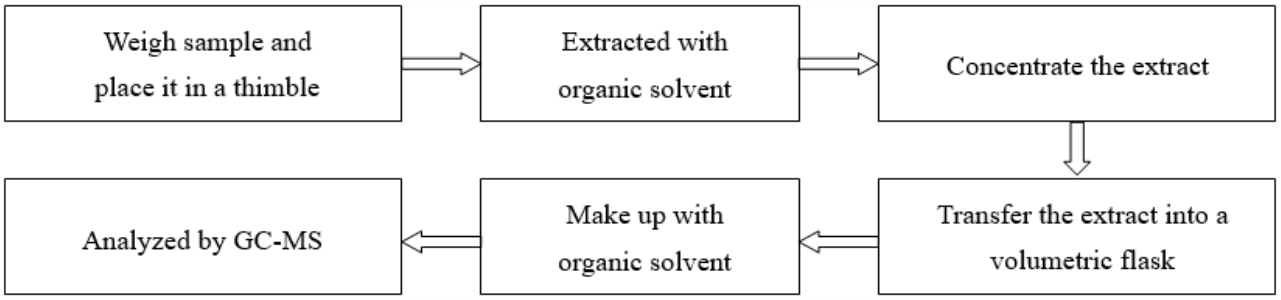
2. Mercury (Hg)



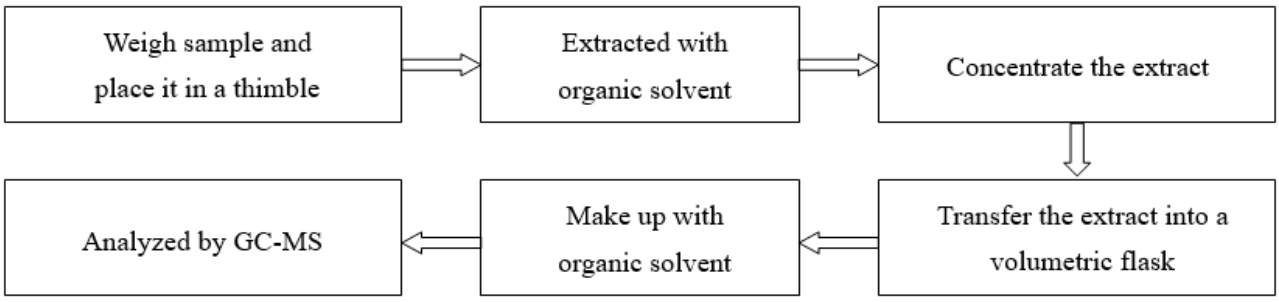
3. Hexavalent Chromium (Cr(VI))



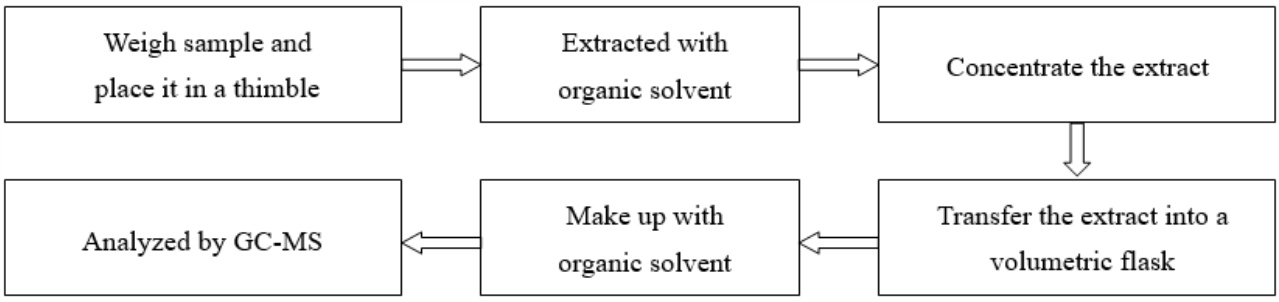
4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



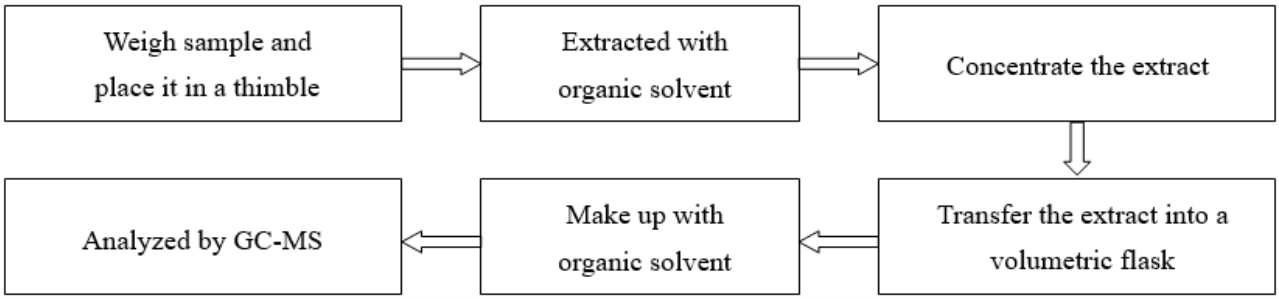
5. Phthalates (DBP, BBP, DEHP, DIBP)



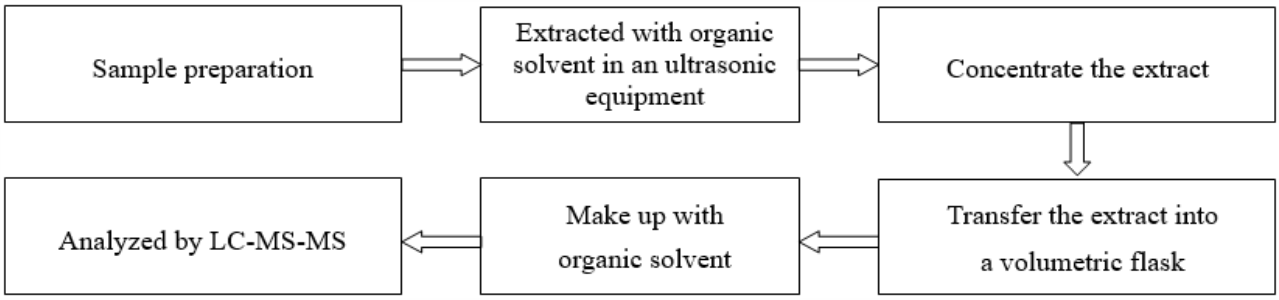
6. Hexabromocyclododecane (HBCDD)



7. Phthalates

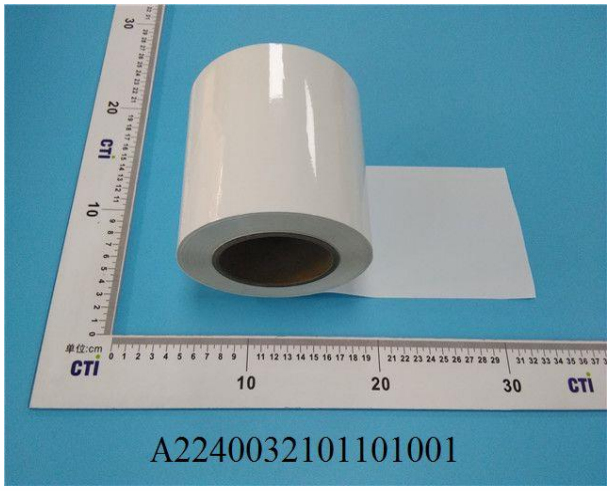


8. Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS)



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. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;
6. 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

BCPR12-37、BCPRZ12-37、BCPR19-43、BCPRZ19-43、BCPR25-43、BCPRZ25-43、BCPR19-46、BCPRZ19-46、BCPR25-46、BCPRZ25-46、BCPR25-50、BCPRZ25-50、BCPR25-60、BCPRZ25-60、BCPR25-65、BCPRZ25-65、BCPR25-70、BCPRZ25-70、BCPR32-60、BCPRZ32-60、BCPR32-80、BCPRZ32-80、BCPR50-80、BCPRZ50-80、BCPR50-90、BCPRZ50-90、BCPR50-92、BCPRZ50-92、BCPR50-100、BCPRZ50-100、 BCPR37-105、BCPRZ37-105、BCPR43-105、BCPRZ43-105、BCPR50-105、BCPRZ50-105、BCPR90-105、BCPRZ90-105、BCPR92-105、BCPRZ92-105、BCPR60-105、BCPRZ60-105、BCPR65-105、BCPRZ65-105、BCPR70-105、BCPRZ70-105、BCPR80-105、BCPRZ80-105、BCPR100-105、BCPRZ100-105、BCPR37-105(300V)、BCPRZ37-105(300V)、BCPR43-105（300V）、BCPRZ43-105（300V）、BCPR50-105（300V）、BCPRZ50-105（300V）、BCPR60-105（300V）、BCPRZ60-105（300V）、 BCPR80-105（300V）、BCPRZ80-105（300V）、BCPR90-105（300V）、BCPRZ90-105（300V）、BCPR92-105（300V）、 BCPRZ92-105（300V）、BCPR100-105（300V）、BCPRZ100-105（300V）

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 A2240032101101001.

检测报告
Test Report

报告编号 A2230651787101001E
Report No. A2230651787101001E

报告抬头公司名称
Company Name shown on Report
泰州市常泰电子有限公司
TAIZHOU CHANGTAI ELECTRONIC CO., LTD

地 址
Address
江苏省泰州市高港区高新技术产业园区永盛路11号
NO.11,YONGSHENG ROAD, GAOGANG HIGH TECH INDUSTRIAL PARK,TAIZHOU CITY

以下测试之样品及样品信息由申请者提供并确认
The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

样品名称 Sample Name	镀锡铜导体 Tinned copper conductor
样品接收日期 Sample Received Date	2023.12.11 Dec. 11, 2023
样品检测日期 Testing Period	2023.12.11-2023.12.15 Dec. 11, 2023 to Dec. 15, 2023

检测要求
Test Requested
根据客户要求，对所提交样品中的铅(Pb)，镉(Cd)，汞(Hg)，六价铬(Cr(VI))，多溴联苯(PBBs)，多溴二苯醚(PBDEs)，邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)，铍(Be)，锑(Sb)，氟(F)，氯(Cl)，溴(Br)，碘(I)，全氟辛酸(PFOA)，全氟辛烷磺酸(PFOS)进行测试。
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), Beryllium(Be), Antimony(Sb), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I), Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS) in the submitted sample(s).

检测依据/检测结果
Test Method/Test Result(s)
请参见下页。
Please refer to the following page(s).

批 准
Approved by

陈凯敏
实验室经理 Lab Manager

日 期
Date
2023.12.15

No. R295827358

上海华测品标检测技术有限公司
Centre Testing International Pinbiao(Shanghai) Co., Ltd.
上海市闵行区万芳路1351号
No.1351, Wanfang Road, Minhang District, Shanghai, China

检测报告
Test Report

****

结论 Conclusion

测试样品 Tested Sample	依据标准/指令 According to standard/directive	结果 Result
提交样品 Submitted Sample	欧盟RoHS指令2011/65/EU及其修订指令(EU) 2015/863 RoHS Directive 2011/65/EU with amendment (EU) 2015/863	符合 PASS

****

符合表示检测结果满足欧盟RoHS指令2011/65/EU及其修订指令(EU) 2015/863要求的限值。
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.

检测报告
Test Report

检测依据 Test Method

测试项目 Test Item(s)	测试方法 Test Method	测试仪器 Measured Equipment(s)
铅 Lead (Pb)	IEC 62321-5:2013	ICP-OES
镉 Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
汞 Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
六价铬 Hexavalent Chromium (Cr(VI))	IEC 62321-7-1:2015	UV-Vis
多溴联苯 Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
铍 Beryllium(Be)	参考US EPA 3050B:1996 & US EPA 6010D:2018* Refer to US EPA 3050B:1996 & US EPA 6010D:2018*	ICP-OES
锑 Antimony(Sb)	参考US EPA 3050B:1996 & US EPA 6010D:2018* Refer to US EPA 3050B:1996 & US EPA 6010D:2018*	ICP-OES
氟 Fluorine (F)	参考EN 14582:2016 Refer to EN 14582:2016	IC
氯 Chlorine (Cl)	参考EN 14582:2016 Refer to EN 14582:2016	IC
溴 Bromine (Br)	参考EN 14582:2016 Refer to EN 14582:2016	IC
碘 Iodine (I)	参考EN 14582:2016 Refer to EN 14582:2016	IC
全氟辛酸 Perfluorooctanoic Acid(PFOA)	参考US EPA 3550C:2007 & US EPA 8321B:2007* Refer to US EPA 3550C:2007 & US EPA 8321B:2007*	LC-MS-MS/LC-MS
全氟辛烷磺酸 Perfluorooctane Sulfonates(PFOS)	参考US EPA 3550C:2007 & US EPA 8321B:2007* Refer to US EPA 3550C:2007 & US EPA 8321B:2007*	LC-MS-MS/LC-MS

检测报告
Test Report

检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
铅 Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
镉 Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
六价铬 Hexavalent Chromium (Cr(VI))	N.D. ▼	0.10 μg/cm² (LOQ)	1000 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
多溴联苯 Polybrominated Biphenyls (PBBs)			
一溴联苯 Monobromobiphenyl	N.D.	5 mg/kg	1000 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	5 mg/kg	
三溴联苯 Tribromobiphenyl	N.D.	5 mg/kg	
四溴联苯 Tetrabromobiphenyl	N.D.	5 mg/kg	
五溴联苯 Pentabromobiphenyl	N.D.	5 mg/kg	
六溴联苯 Hexabromobiphenyl	N.D.	5 mg/kg	
七溴联苯 Heptabromobiphenyl	N.D.	5 mg/kg	
八溴联苯 Octabromobiphenyl	N.D.	5 mg/kg	
九溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg	

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)			
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromodiphenyl ether	N.D.	5 mg/kg	
三溴二苯醚 Tribromodiphenyl ether	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	5 mg/kg	
五溴二苯醚 Pentabromodiphenyl ether	N.D.	5 mg/kg	
六溴二苯醚 Hexabromodiphenyl ether	N.D.	5 mg/kg	
七溴二苯醚 Heptabromodiphenyl ether	N.D.	5 mg/kg	
八溴二苯醚 Octabromodiphenyl ether	N.D.	5 mg/kg	
九溴二苯醚 Nonabromodiphenyl ether	N.D.	5 mg/kg	
十溴二苯醚 Decabromodiphenyl ether	N.D.	5 mg/kg	

检测报告
Test Report

检测结果 Test Result(s)

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL	限值 Limit
	001		
邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)			
邻苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
铍 Beryllium (Be)	N.D.	10 mg/kg
锑 Antimony (Sb)	N.D.	10 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
氟 Fluorine (F)	N.D.	10 mg/kg
氯 Chlorine (Cl)	N.D.	10 mg/kg
溴 Bromine (Br)	N.D.	10 mg/kg
碘 Iodine (I)	N.D.	10 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
全氟辛酸 Perfluorooctanoic Acid (PFOA)	N.D.	0.010 mg/kg

测试项目 Tested Item(s)	结果 Result	方法检出限 MDL
	001	
全氟辛烷磺酸 Perfluorooctane Sulfonates (PFOS)	N.D.	0.010 mg/kg

检测报告
Test Report

样品/部位描述Sample/Part Description

序号 No.	CTI样品ID CTI Sample ID	描述 Description
1	001	有银色镀层的金属丝 Metal wire with silvery plating

备注: **对于检测铅，镉，汞，铍，锑之样品已消解完全。**

-N.D. = 未检出 (小于方法检出限或定量限)

-mg/kg = ppm = 百万分之一

-1000 mg/kg = 0.1%

-LOQ = 定量限，六价铬的定量限为0.10 μg/cm²

-▼六价铬浓度小于0.10 μg/cm²，样品未检出六价铬。由于未获知样品的存储条件和生产日期，样品的六价铬测试结果仅能代表测试时样品含六价铬的状态。

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

-MDL = Method Detection Limit

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

-mg/kg = ppm = parts per million

-1000 mg/kg = 0.1%

-LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 μg/cm²

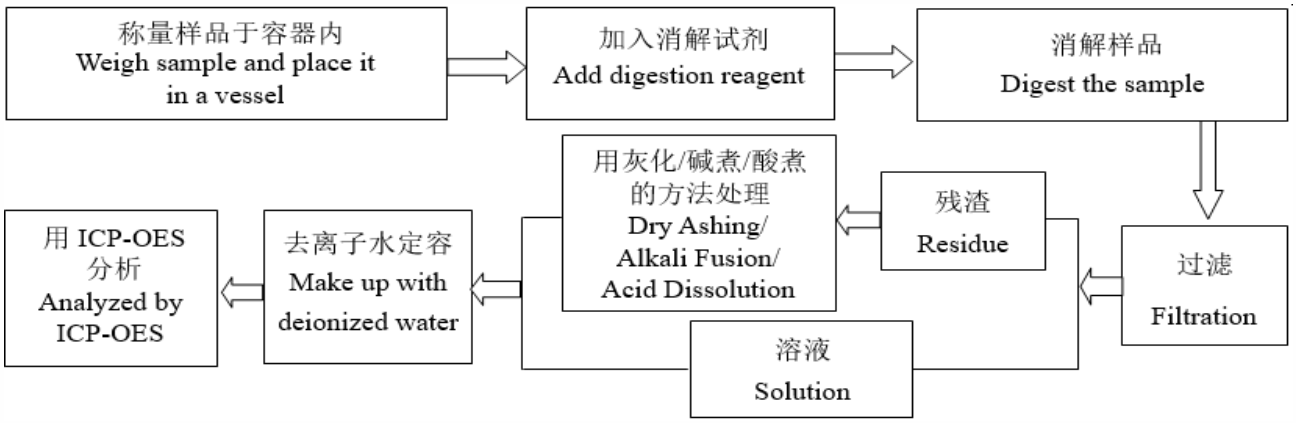
-▼The sample is negative for Cr(VI) − The Cr(VI) concentration is below 0.10 μg/cm². The coating is considered a non-Cr(VI) based coating. Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

注释: **本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。.**
“*”表示该方法不在CNAS认可范围内。

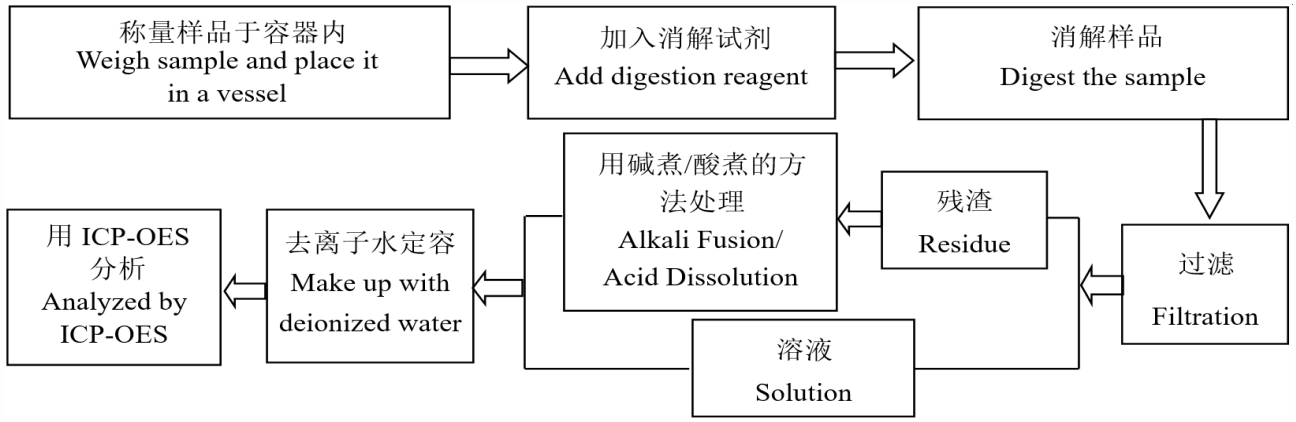
Note: **The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.**
“*” indicates the method(s) is (are) not in CNAS accreditation scope.

检测流程 Test Process

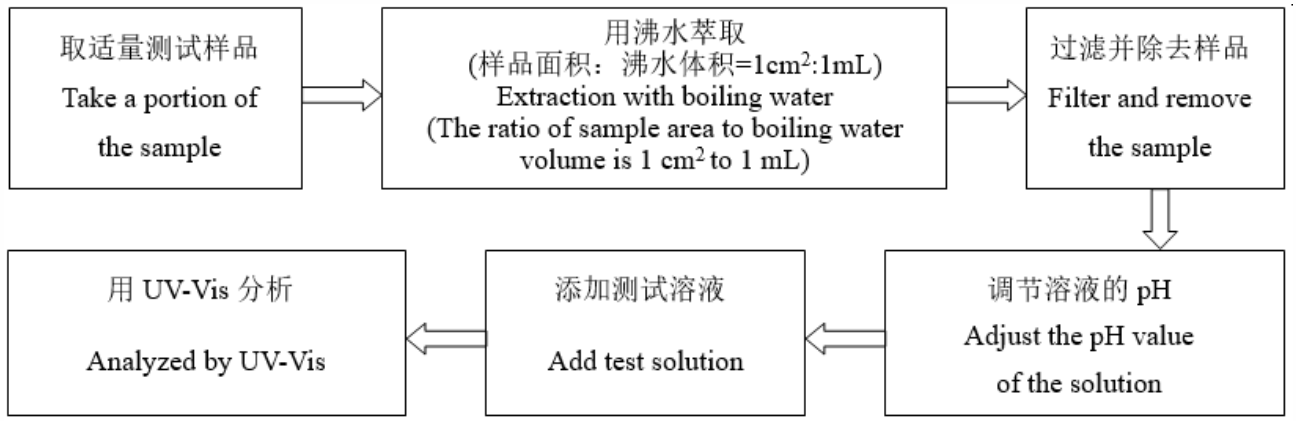
1. 铅(Pb)， 镉(Cd)
Lead (Pb), Cadmium (Cd)



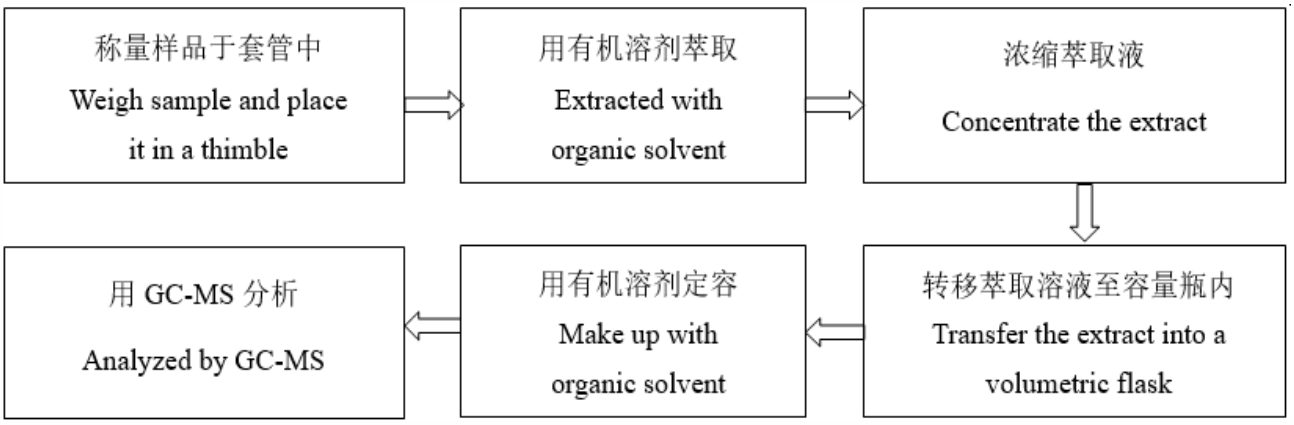
2. 汞(Hg)
Mercury (Hg)



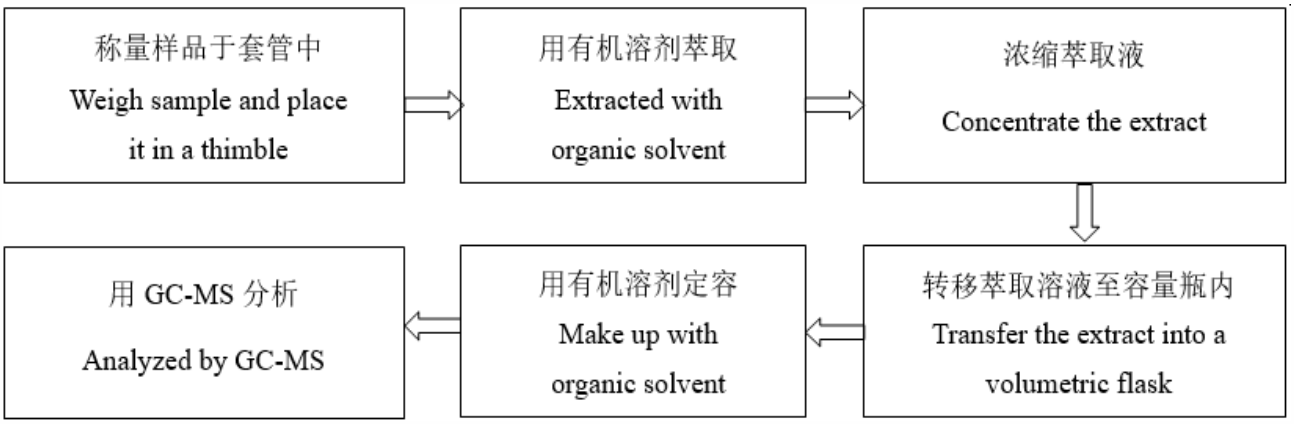
3. 六价铬(Cr(VI))
Hexavalent Chromium (Cr(VI))



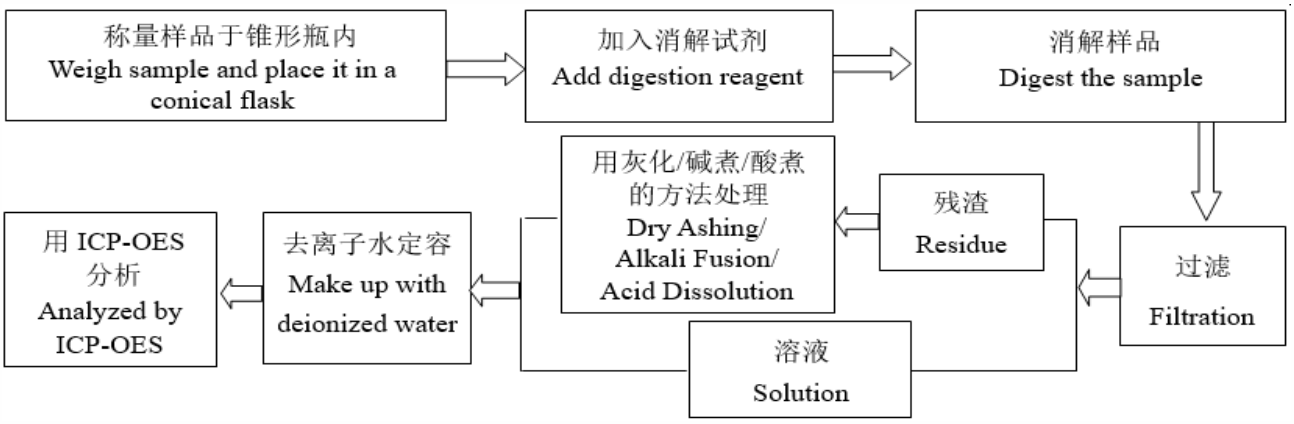
4. 多溴联苯(PBBs)， 多溴二苯醚(PBDEs)
Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



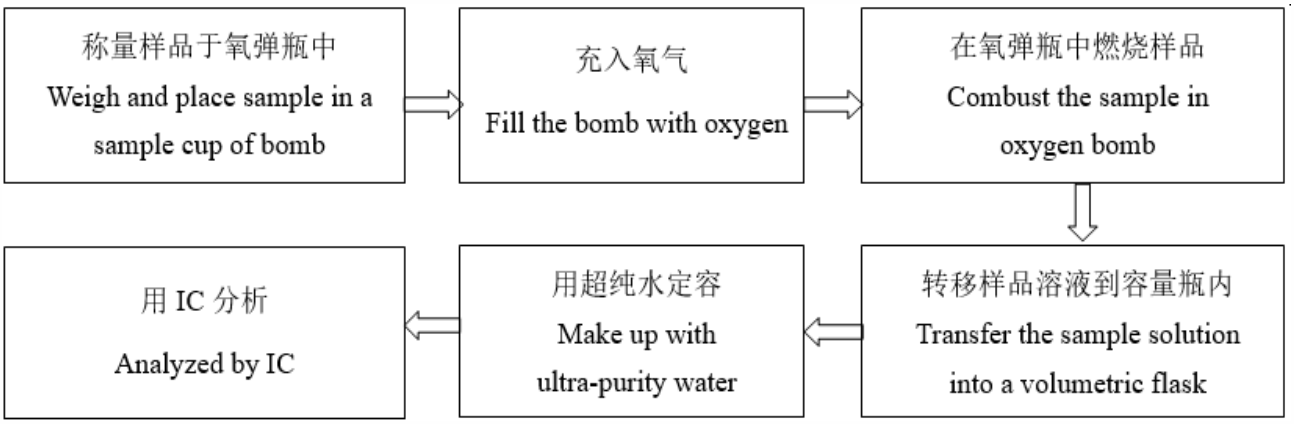
5. 邻苯二甲酸酯(DBP， BBP， DEHP， DIBP)
Phthalates (DBP, BBP, DEHP, DIBP)



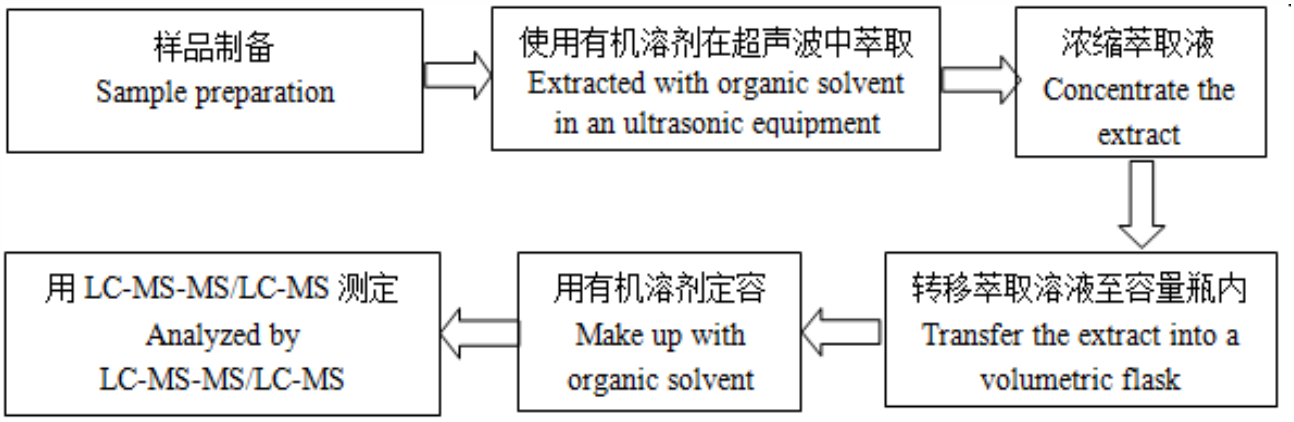
6. 铍(Be)， 锑(Sb)
Beryllium(Be), Antimony(Sb)



7. 氟(F)， 氯(Cl)， 溴(Br)， 碘(I)
Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)



8. 全氟辛酸(PFOA)， 全氟辛烷磺酸(PFOS)
Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS)



检测报告
Test Report

样品图片
Photo(s) of the sample(s)



声明Statement：

1. 检测报告无批准人签字、“专用章”及报告骑缝章无效；
   This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. 报告抬头公司名称及地址、样品及样品信息由申请者提供，申请者应对其真实性负责，CTI未核实其真实性；
   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. 本报告检测结果仅对受测样品负责；
   The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 未经CTI书面同意，不得部分复制本报告；
   Without written approval of CTI, this report can’t be reproduced except in full;
5. 如检测报告中的英文内容与中文内容有差异，以中文为准。
   In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

报告结束
*** End of report ***

Test Report

Report No. A2240032101101004 Page 1 of 11

Company Name shown on Report	GUANGDONG BALTRANS NEW MATERIAL CO.,LTD/FOSHAN CITY BAOCHANGXINCAILIAO CO.,LTD
Address	NO.14 FUAN EAST ROAD,SHUIBU TOWN.TAISHAN CITY,GUANGDONG 529200 CHINA/NO 18CHANGYE RD HUAKOUXINJI INDUSTRIAL ZONE RONGGUI TOWNSHUNDE FOSHAN,GUANGDONG 528305 CHINA

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

Sample Name	Halogen free blue reinforcing plate
Part No.	BCR188-225HF
Sample Received Date	Jan. 16, 2024
Testing Period	Jan. 16, 2024 to Jan. 24, 2024

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), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I), Tetrabromobisphenol A (TBBP-A), Phthalates,Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS) in the submitted sample(s).
Test Method/Test Result(s)	Please refer to the following page(s).

Approved by: Wenjun Wang Date: Jan. 24, 2024

Wenjun Wang
Lab Authorized Signatory

No. R229111430

Centre Testing International Group Co.,Ltd. Shunde Branch
Yongying Building, Section 2, No.8, East of Rongqi Avenue, Ronggui, Shunde District, Foshan, Guangdong, China

Test Report

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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.

Test Report

Test Method

Tested 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
Fluorine (F)	Refer to EN 14582:2016	IC
Chlorine (Cl)	Refer to EN 14582:2016	IC
Bromine (Br)	Refer to EN 14582:2016	IC
Iodine (I)	Refer to EN 14582:2016	IC
Tetrabromobisphenol A (TBBP-A) *	Refer to US EPA 3550C:2007 & US EPA 8321B:2007	LC-MS-MS
Phthalates*	Refer to EN 14372:2004(E)	GC-MS
Perfluorooctanoic Acid(PFOA) *	Refer to US EPA 3550C:2007 & US EPA 8321B:2007	LC-MS-MS
Perfluorooctane Sulfonates(PFOS) *	Refer to US EPA 3550C:2007 & US EPA 8321B:2007	LC-MS-MS

Test Report

Test Result(s)

Tested Item(s)	Result	MDL	Limit
	004		
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
	004		
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
	004		
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

Tested Item(s)	Result	MDL	Limit
	004		
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
	004	
Hexabromocyclododecane (HBCDD)*	N.D.	5 mg/kg

Tested Item(s)	Result	MDL
	004	
Fluorine (F)	N.D.	10 mg/kg
Chlorine (Cl)	188 mg/kg	10 mg/kg
Bromine (Br)	N.D.	10 mg/kg
Iodine (I)	N.D.	10 mg/kg

Tested Item(s)	Result	MDL
	004	
Tetrabromobisphenol A (TBBP-A)*	N.D.	5 mg/kg

Test Report

Tested Item(s)	Result	MDL
	004	
Phthalates*		
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	30 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	30 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	30 mg/kg
Di-n-octyl phthalate (DNOP) CAS#:117-84-0	N.D.	30 mg/kg
Di-isononyl phthalate (DINP) CAS#:28553-12-0,68515-48-0	N.D.	50 mg/kg
Di-iso-decyl phthalate (DIDP) CAS#:26761-40-0,68515-49-1	N.D.	50 mg/kg
Dimethyl phthalate (DMP) CAS#:131-11-3	N.D.	30 mg/kg
Diethyl phthalate (DEP) CAS#:84-66-2	N.D.	30 mg/kg
Dipropyl phthalate (DPrP) CAS#:131-16-8	N.D.	30 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	30 mg/kg
Dipentyl phthalate (DPP/DPENP) CAS#:131-18-0	N.D.	30 mg/kg
Dicyclohexyl phthalate (DCHP) CAS#:84-61-7	N.D.	30 mg/kg
Diisooctyl phthalate (DIOP) CAS#:27554-26-3	N.D.	50 mg/kg
Dinonyl phthalate (DNP) CAS#:84-76-4	N.D.	30 mg/kg
Di-n-hexyl phthalate (DNHP/DHEXP) CAS#:84-75-3	N.D.	30 mg/kg
Dibenzyl phthalate (DBzP) CAS#:523-31-9	N.D.	30 mg/kg
Diphenyl phthalate (DPhP) CAS#:84-62-8	N.D.	30 mg/kg

Test Report

Tested Item(s)	Result	MDL
	004	
Perfluorooctanoic Acid (PFOA)*	N.D.	0.010 mg/kg

Tested Item(s)	Result	MDL
	004	
Perfluorooctane Sulfonates (PFOS)*	N.D.	0.010 mg/kg

Sample/Part Description

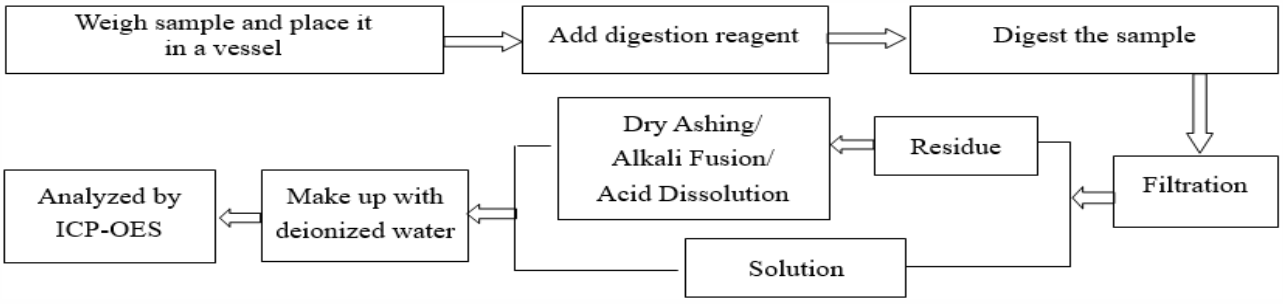
No.	CTI Sample ID	Description
1	004	Blue plastic

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%

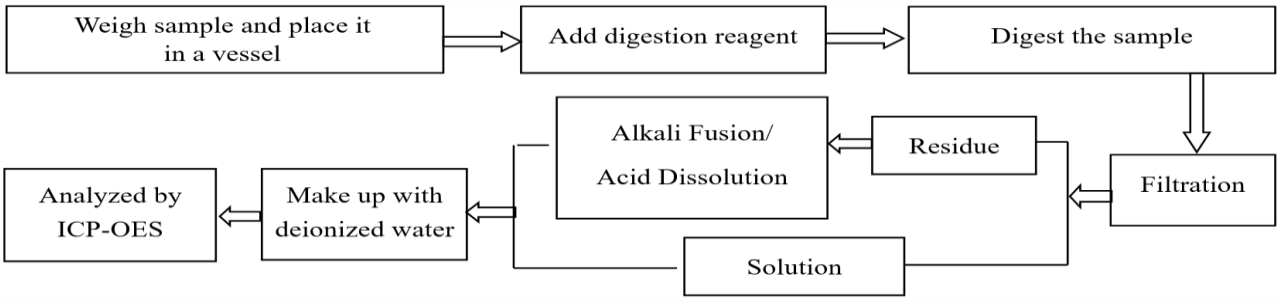
Note: **"*" indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.**

Test Process

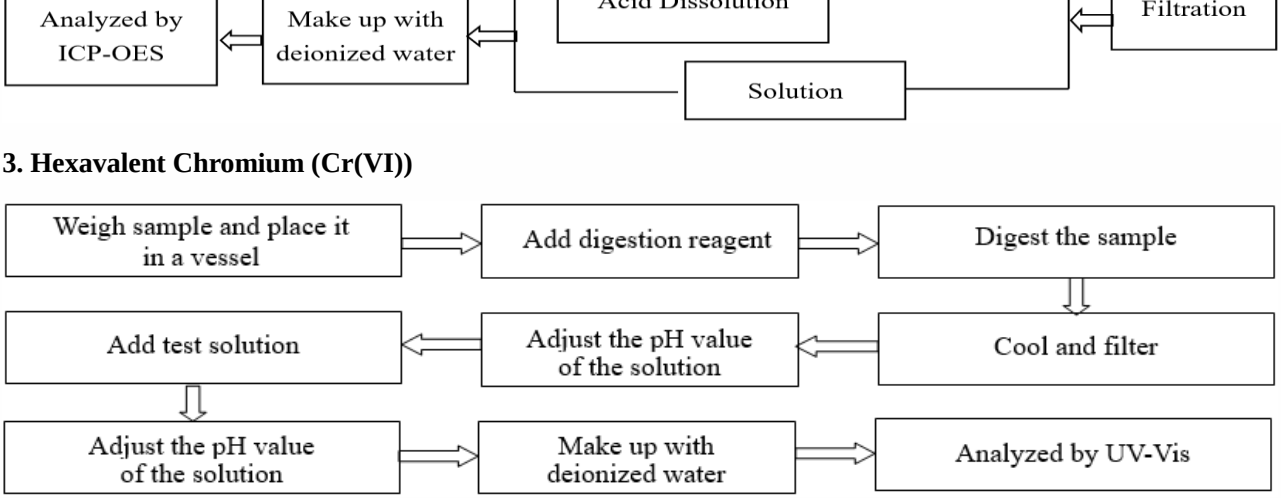
1. Lead (Pb), Cadmium (Cd), Chromium(Cr)



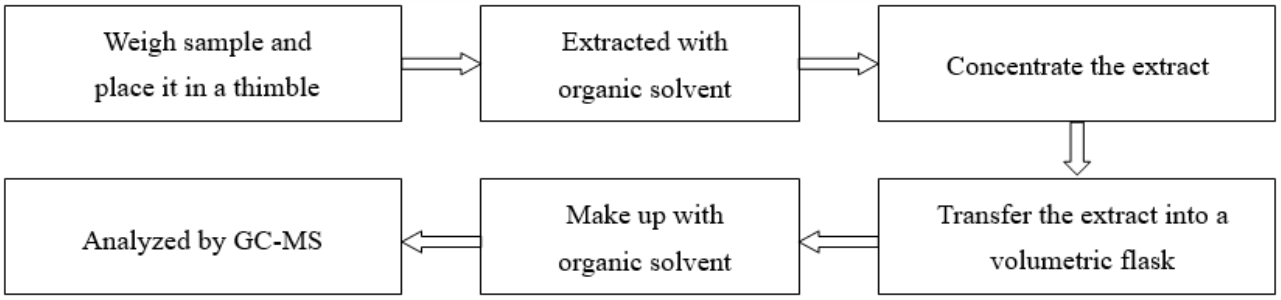
2. Mercury (Hg)



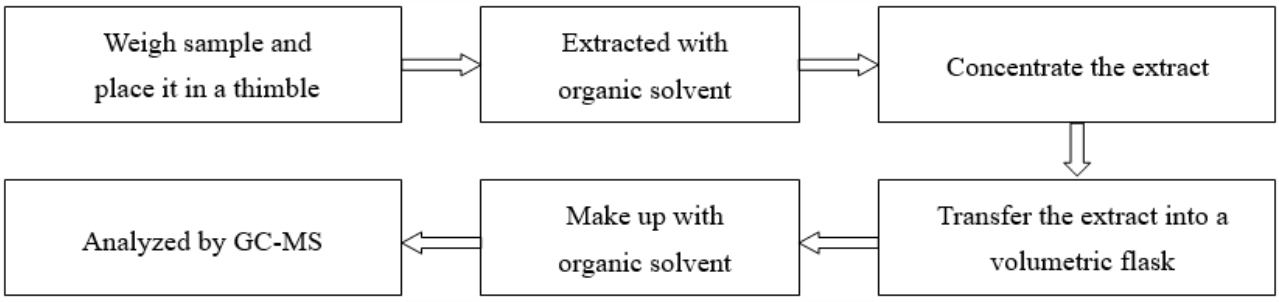
3. Hexavalent Chromium (Cr(VI))



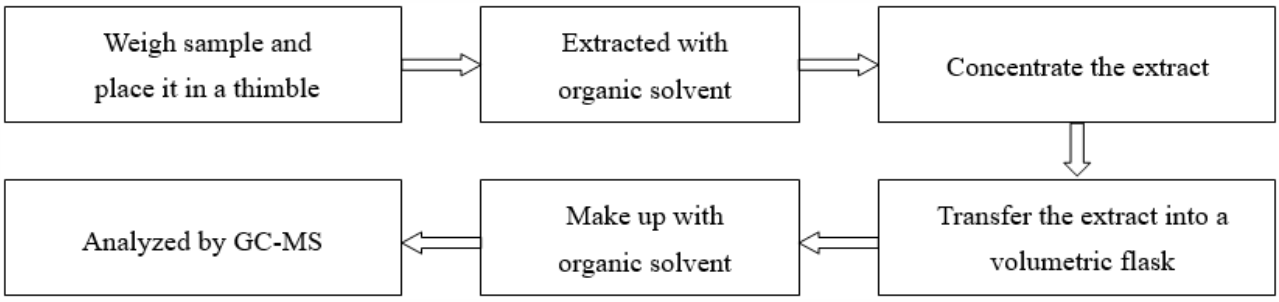
4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



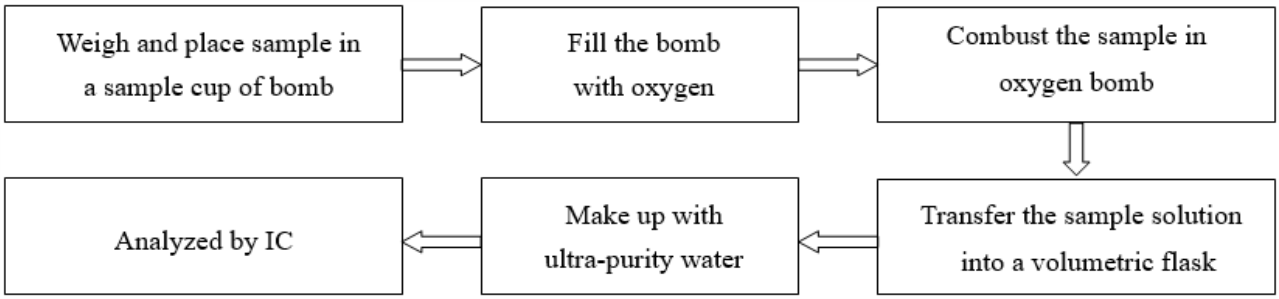
5. Phthalates (DBP, BBP, DEHP, DIBP)



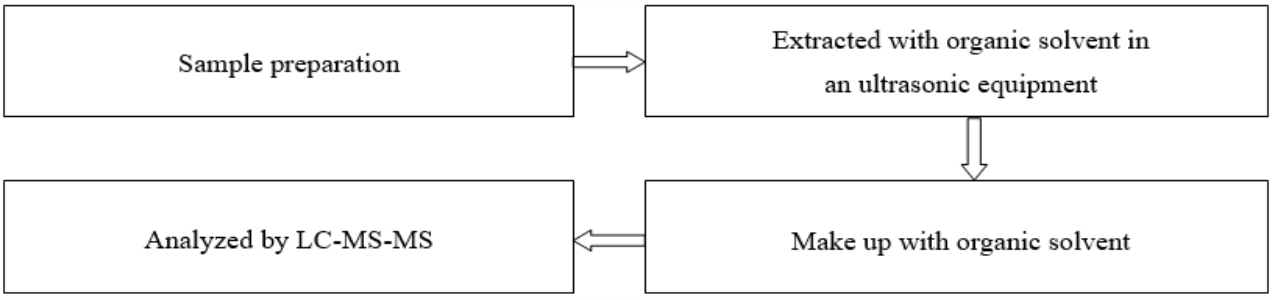
6. Hexabromocyclododecane (HBCDD)



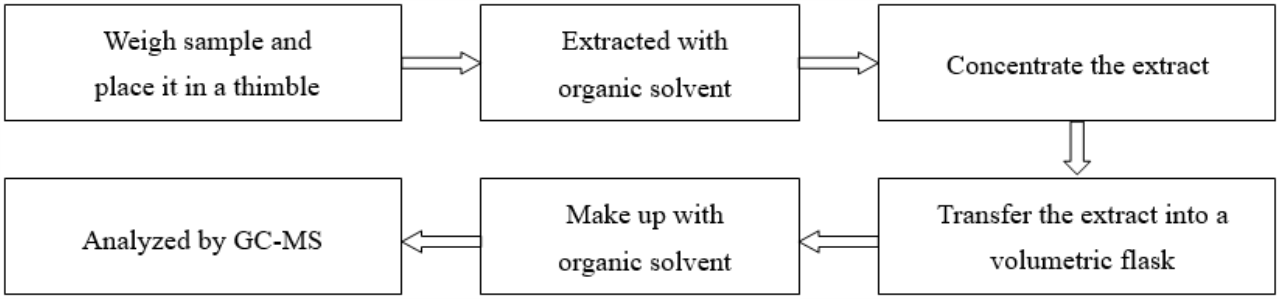
7. Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)



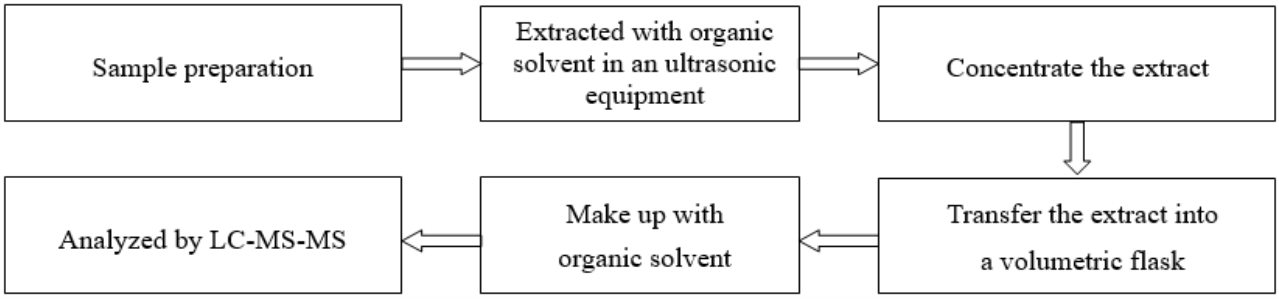
8. Tetrabromobisphenol A (TBBP-A)



9. Phthalates

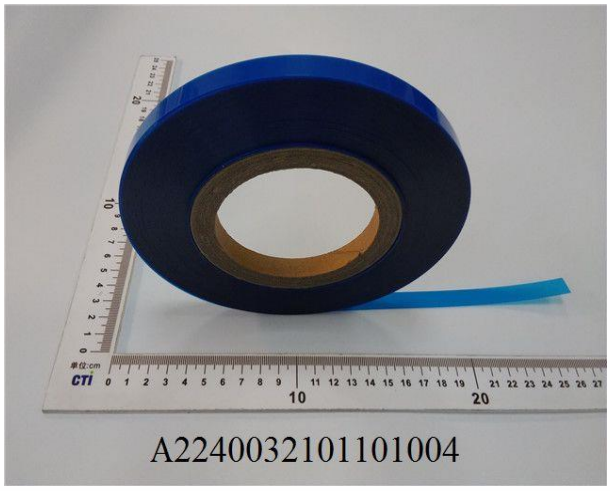


10. Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS)



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. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;
6. 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

BCR32-85HF、BCR75-100HF、BCR75-120HF、BCR100-125HF、BCR100-130HF、BCR125-160HF、BCR150-183HF、BCR150-185HF、BCR150-195HF、BCR175-205HF、BCR175-215HF、BCR175-223HF、BCR175-225HF、BCR150-205HF 、BCR188-215HF、BCR188-225HF、BCR188-223HF、BCR188-228HF、BCR188-230HF、BCR188-233HF、BCR188-235HF、BCR188-240HF、BCR215-250HF、BCR215-240HF、BCR250-282HF、BCR250-295HF、BCRN100-125HF、BCRN100-130HF、BCRN125-160HF、BCRN150-183HF、BCRN150-185HF、BCRN150-195HF、BCRN175-205HF、BCRN175-215HF、BCRN175-223HF、BCRN175-225HF、BCRN150-205HF 、BCRN188-215HF、BCRN188-225HF、BCRN188-223HF、BCRN188-228HF、BCRN188-233HF、BCRN188-235HF、BCRN188-240HF、BCRN215-250HF、BCRN215-240HF、BCRN250-282HF、BCRN250-295HF
BCRM75-100HF、BCRM100-125HF、BCRM100-130HF、BCRM125-160HF、BCRM150-175HF、BCRM150-183HF、BCRM150-185HF、BCRM150-195HF、BCRM175-205HF、BCRM188-215HF、BCRM188-225HF、BCRM188-235HF、BCRM188-240HF、BCRM215-250HF、BCRM250-282HF、BCRM250-295HF、GDBCRHF75-100C、GDBCRHF100-130C、GDBCRHF125-160C 、GDBCRHF188-225C、GDBCRHF188-238C、BCRHF175-205C

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 A2240032101101004.

Test Report

No.: SHAEC24000830123 **Date:** Jan 18, 2024

Client Name: HITACHI INDUSTRIAL EQUIPMENT SYSTEMS CO.,LTD.

Client Address: 1-1,HIGASHITAGA-CHO 1-CHOME,HITACHI-SHI,IBARAKI-KEN,JAPAN

Sample Name: Hitachi IJ Printer INK

Model No.: 1119K

Client Ref. Information: According to the customer`s requirements, dry at 105 ℃until tested after curing

The above sample(s) and information were provided by the client.

SGS Job No.: TIC1020231130100928HLNH

Sample Receiving Date: Jan 11, 2024

Testing Period: Jan 11, 2024 ~ Jan 18, 2024

Test Requested: Select test(s) as requested by the client.

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

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

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass
Element(s)	See Results
Halogen	See Results
Polyvinyl chloride (PVC)	See Results
Hexabromocyclododecane (HBCDD)	See Results
Perfluorooctane Sulfonates (PFOS) and its derivatives and Perfluorooctanoic Acid (PFOA) and its salts	See Results
Phthalates	See Results

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Sue Sheng
Approved Signatory

scan to see the report
75BA12CA

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中国·上海·徐汇区宜山路889号3号楼 邮编: 200233 t HL (86–21) 61402594 f HL (86–21)61156899 e sgs.china@sgs.com

Test Result(s):

Test Part Description：

SN ID	Sample No.	SGS Sample ID	Description
SN1	A12	SHA24-0008301-0001.C012	Black liquid

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A12
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium(Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybromobiphenyl (PBBs)	1000	mg/kg	-	ND
Monobromobiphenyl (MonoBB)	-	mg/kg	5	ND
Dibromobiphenyl (DiBB)	-	mg/kg	5	ND
Tribromobiphenyl (TriBB)	-	mg/kg	5	ND
Tetrabromobiphenyl (TetraBB)	-	mg/kg	5	ND
Pentabromobiphenyl (PentaBB)	-	mg/kg	5	ND
Hexabromobiphenyl (HexaBB)	-	mg/kg	5	ND
Heptabromobiphenyl (HeptaBB)	-	mg/kg	5	ND
Octabromobiphenyl (OctaBB)	-	mg/kg	5	ND
Nonabromobiphenyl (NonaBB)	-	mg/kg	5	ND
Decabromobiphenyl (DecaBB)	-	mg/kg	5	ND
Polybromodiphenyl ether(PBDEs)	1000	mg/kg	-	ND
Monobromodiphenylether (MonoBDE)	-	mg/kg	5	ND
Dibromodiphenylether (DiBDE)	-	mg/kg	5	ND
Tribromodiphenylether (TriBDE)	-	mg/kg	5	ND
Tetrabromodiphenylether (TetraBDE)	-	mg/kg	5	ND
Pentabromodiphenylether (PentaBDE)	-	mg/kg	5	ND
Hexabromodiphenylether (HexaBDE)	-	mg/kg	5	ND
Heptabromodiphenylether (HeptaBDE)	-	mg/kg	5	ND
Octabromodiphenylether (OctaBDE)	-	mg/kg	5	ND
Nonabromodiphenylether (NonaBDE)	-	mg/kg	5	ND
Decabromodiphenylether (DecaBDE)	-	mg/kg	5	ND
Bis-(2-ethylhexyl) Phthalate(DEHP)	1000	mg/kg	50	ND
Butyl benzyl phthalate (BBP)	1000	mg/kg	50	ND

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Test Item(s)	Limit	Unit(s)	MDL	A12
Dibutyl Phthalate(DBP)	1000	mg/kg	50	ND
Diisobutyl Phthalate(DIBP)	1000	mg/kg	50	ND

Notes:
(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
(2) IEC 62321 series is equivalent to EN 62321 series.
(3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Element(s)

Test Method: With reference to US EPA 3052:1996, analysis was performed by ICP-OES/AAS.

Test Item(s)	Unit(s)	MDL	A12
Cobalt(Co)	mg/kg	5	ND
Beryllium(Be)	mg/kg	5	ND
Antimony(Sb)	mg/kg	10	ND
Tin(Sn)	mg/kg	5	ND

Halogen

Test Method: With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	Unit(s)	MDL	A12
Fluorine(F)	mg/kg	20	ND
Chlorine(Cl)	mg/kg	50	ND
Bromine(Br)	mg/kg	50	ND
Iodine(I)	mg/kg	50	ND

Polyvinyl chloride (PVC)

Test Method: With reference to SGS in house method, analysis was performed by FTIR/HATR.

Test Item(s)	A12
Polyvinyl chloride (PVC)	Negative

Notes:
(1) Negative=Undetectable, Positive=Detectable

Hexabromocyclododecane (HBCDD)

Test Method: With reference to US EPA 3550C:2007, analysis was performed by GC-MS.

Test Item(s)	CAS No.	Unit(s)	MDL	A12
Hexabromocyclododecane (HBCDD)	134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6	mg/kg	10	ND

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. Testing Center-Chemical Laboratory

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Perfluorooctane Sulfonates (PFOS) and its derivatives and Perfluorooctanoic Acid (PFOA) and its salts

Test Method: With reference to CEN/TS 15968:2010, analysis was performed by HPLC-MS or LC-MS/MS.

Test Item(s)	CAS No.	Unit(s)	MDL	A12
PFOS and its derivatives	-	mg/kg	-	ND
Perfluorooctane Sulfonates (PFOS) and its salts*	1763-23-1	mg/kg	0.010	ND
N-ethylperfluoro-1-octanesulfonamide (N-EtFOSA)	4151-50-2	mg/kg	0.010	ND
N-methylperfluoro-1-octanesulfonamide (N-MeFOSA)	31506-32-8	mg/kg	0.010	ND
2-(N-ethylperfluoro-1-octanesulfonamido) -ethanol (N-EtFOSE)	1691-99-2	mg/kg	0.010	ND
2-(N-methylperfluoro-1-octanesulfonamido) -ethanol (N-MeFOSE)	24448-09-7	mg/kg	0.010	ND
Perfluorooctane Sulfonamide (PFOSA)	754-91-6	mg/kg	0.010	ND
Perfluorooctanoic Acid (PFOA) and its salts*	335-67-1	mg/kg	0.010	ND

Notes:

(1) Perfluorooctanoic acid (PFOA) and its salts* including PFOA (CAS No. 335-67-1), APFO (CAS No. 3825-26-1), PFOA-Na (CAS No. 335-95-5), PFOA-K (CAS No. 2395-00-8), PFOA-Ag (CAS No. 335-93-3) and PFOA-F (CAS No. 335-66-0). The result of PFOA is used to represent PFOA and its salts.

(2) Perfluorooctane sulfonates (PFOS) and its salts* including PFOS (CAS No. 1763-23-1), POSF(CAS No. 307-35-7), PFOS-K (CAS No. 2795-39-3), PFOS-NH_4 (CAS No. 29081-56-9), PFOS-$N(C_{10}H_{21})_2(CH_3)_2$ (CAS No. 251099-16-8), PFOS-$NH_2(C_2H_4OH)_2$ (CAS No. 70225-14-8), PFOS-Li (CAS No. 29457-72-5), PFOS-$N(C_2H_5)_4$ (CAS No. 56773-42-3) and PFOS-Na (CAS No. 4021-47-0). The result of PFOS is used to represent PFOS and its salts.

Phthalates

Test Method: With reference to EN 14372:2004, analysis was performed by GC-MS.

Test Item(s)	CAS No.	Unit(s)	MDL	A12
Dibutyl Phthalate(DBP)	84-74-2	%	0.003	ND
Benzyl Butyl Phthalate(BBP)	85-68-7	%	0.003	ND
Bis-(2-ethylhexyl) Phthalate(DEHP)	117-81-7	%	0.003	ND
Diisononyl Phthalate (DINP)	28553-12-0 /68515-48-0	%	0.010	ND
Di-n-Octyl Phthalate(DNOP)	117-84-0	%	0.003	ND
Diisodecyl Phthalate (DIDP)	26761-40-0 /68515-49-1	%	0.010	ND
Dimethyl Phthalate(DMP)	131-11-3	%	0.003	ND
Diethyl Phthalate(DEP)	84-66-2	%	0.003	ND
Diisobutyl Phthalate(DIBP)	84-69-5	%	0.003	ND
Dipentyl Phthalate (DnPP)	131-18-0	%	0.003	ND

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Test Item(s)	CAS No.	Unit(s)	MDL	A12
Dicyclohexyl Phthalate(DCHP)	84-61-7	%	0.003	ND
Diphenyl Phthalate(DPhP)	84-62-8	%	0.003	ND
Dibenzyl Phthalate(DBzP)	523-31-9	%	0.003	ND
Diisooctyl Phthalate(DIOP)	27554-26-3	%	0.010	ND
Dipropyl Phthalate(DPrP)	131-16-8	%	0.003	ND
Dinonyl Phthalate(DNP)	84-76-4	%	0.003	ND
Di-n-Hexyl Phthalate(DnHP)	84-75-3	%	0.003	ND

Remark:
Result shown is of the total weight of dried sample.
Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.

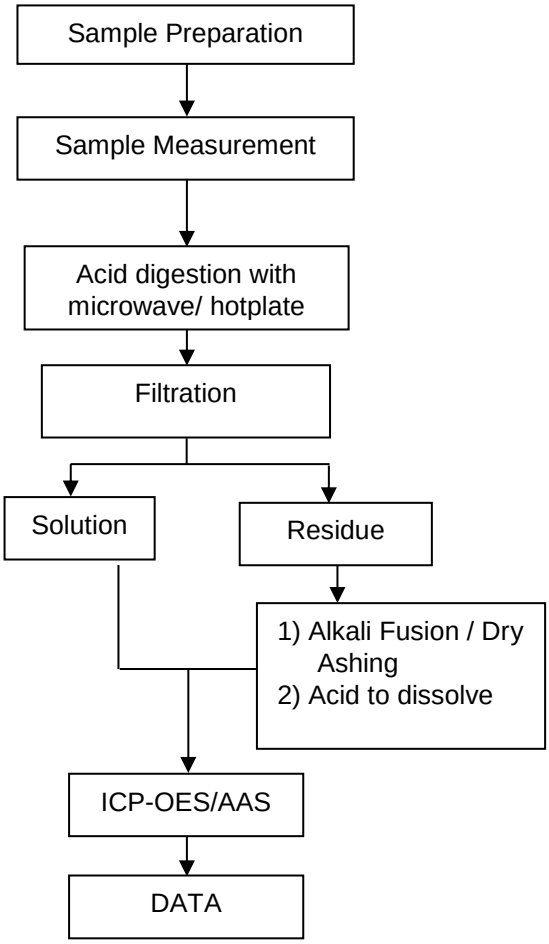
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Elements Testing Flow Chart

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



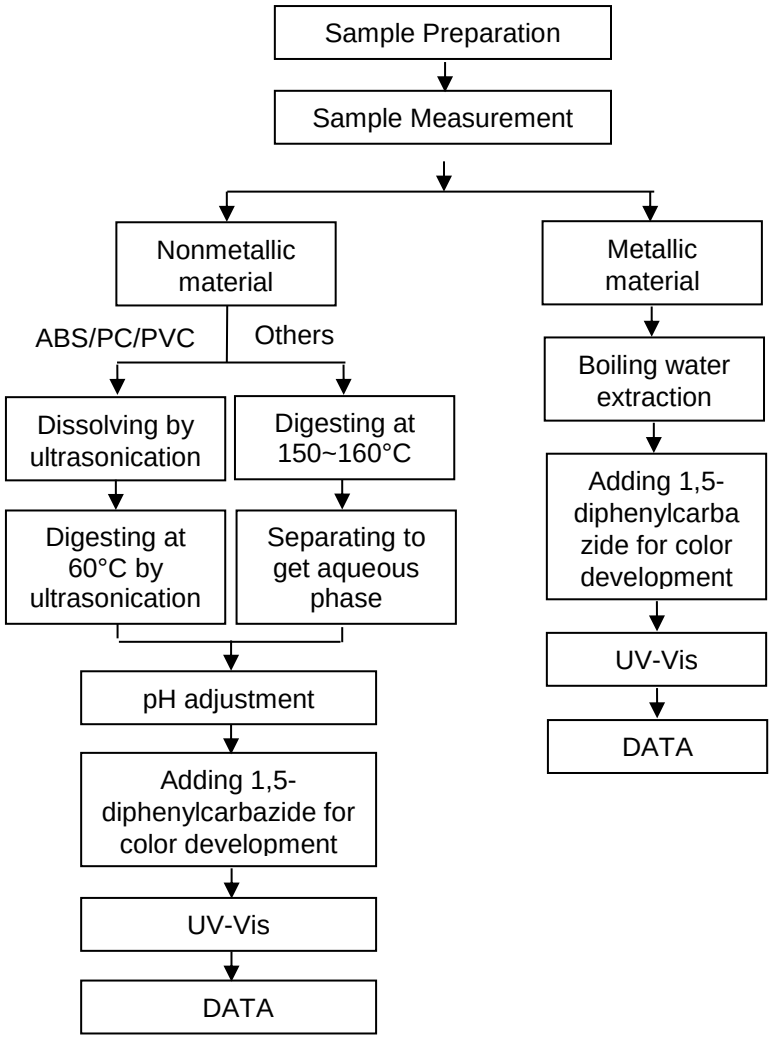
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Hexavalent Chromium (Cr(VI)) Testing Flow Chart



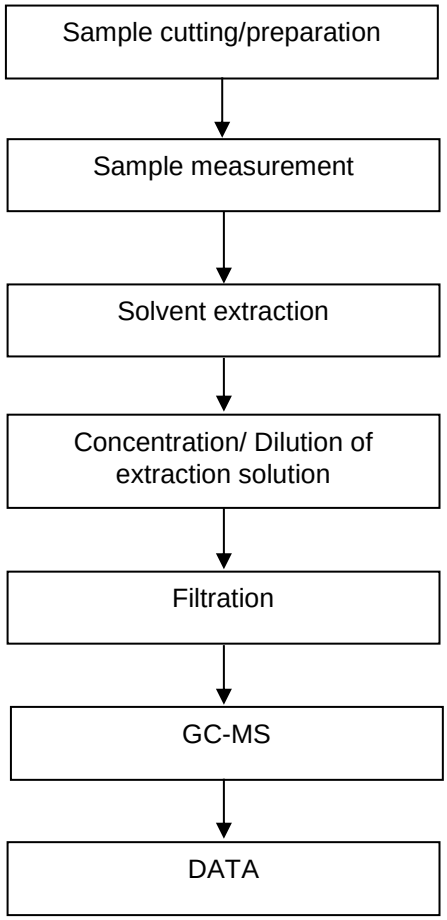
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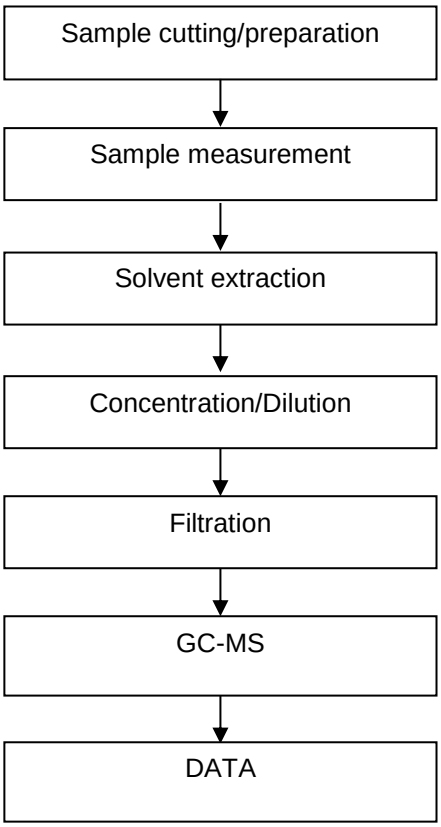
PBBs/PBDEs Testing Flow Chart



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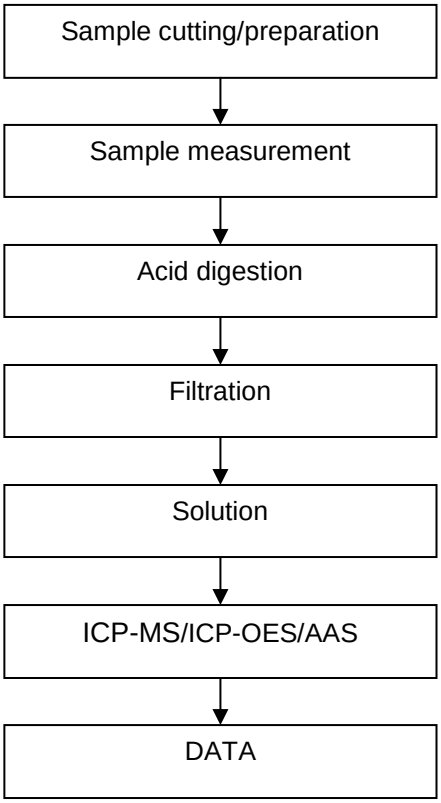
Phthalates Testing Flow Chart



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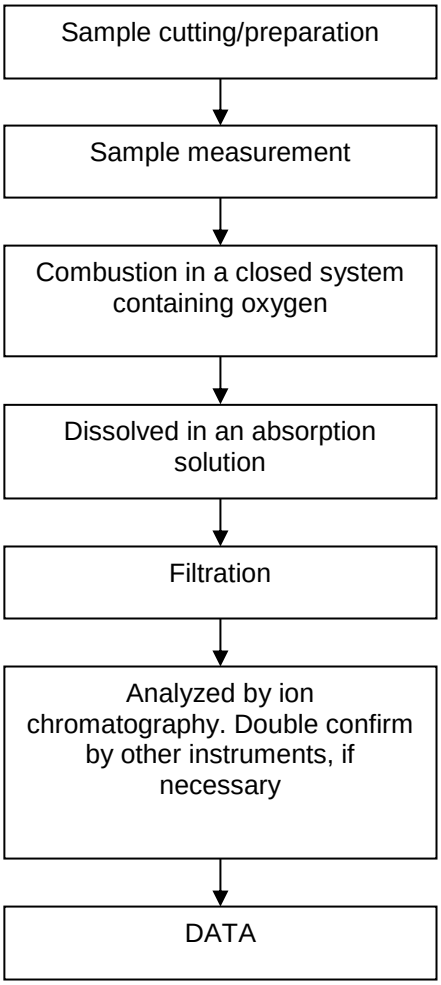
Elements Testing Flow Chart



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Halogen Testing Flow Chart



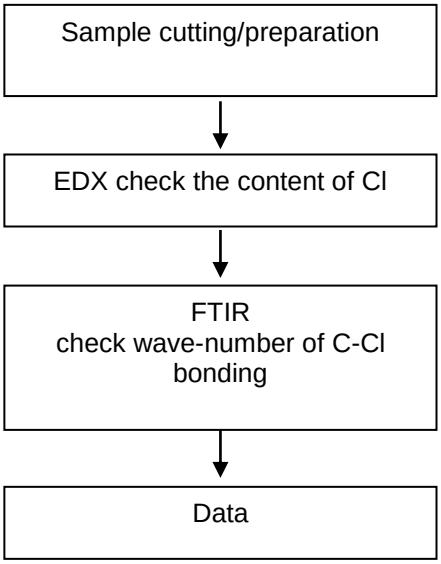
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PVC Testing Flow Chart



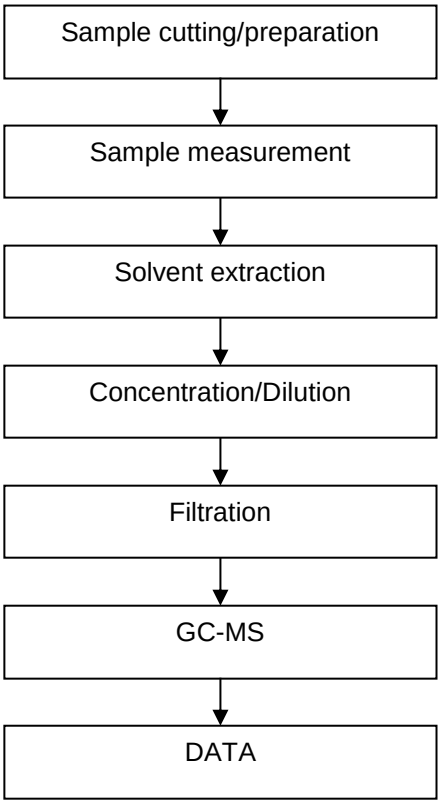
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HBCDD Testing Flow Chart



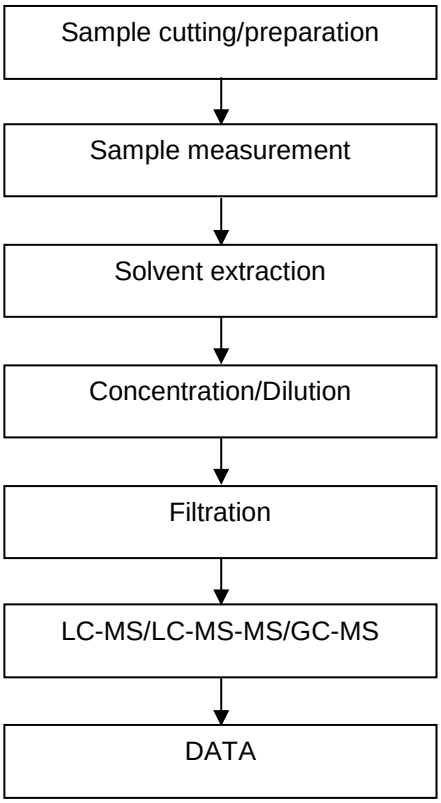
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PFASs/ PFOS/PFOA Testing Flow Chart



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