



**SVHC Assessment Report**

Number : TWNC00189612

Applicant 申請商: Kin Join Co., Ltd.  
No 166 Ren Hua Rd Ta Li City  
Taichung Taiwan Roc

Date : Jan 27, 2011

**Sample Description 樣品敘述:**

One (1) group of submitted samples said to be :  
以下測試樣品乃供應商所提供及確認:

Sample Description : 熱可塑性聚氨酯 (Thermoplastic Polyurethane)  
樣品名稱  
Style / Item No. : TPU 全系列 (65A~72D)  
產品型號  
Date Sample Received : Jan 20, 2011  
收件日期  
Date Test Started : Jan 21, 2011  
開始測試日期

---

**Test Conducted 測試執行:**

As requested by the applicant, for details please refer to attached pages.  
依申請商之要求, 細節請參考附頁.

---

Authorized By:  
On Behalf Of Intertek Testing Services  
Taiwan Limited



---

K. Y. Liang  
Director

This report shall not be reproduced  
except in full, without the written  
approval of the laboratory.

**SVHC Assessment Report**

Number : TWNC00189612

Summary 摘要:

According to specified test processes and currently available analytical techniques, contents of **46** substances of very high concern (SVHC) in candidate list promulgated by European Chemicals Agency (ECHA) are less than 0.1% (w/w) in submitted sample. 依據現行可使用的分析技術與測試結果評估，送檢樣品中針對由歐盟化學總署 (ECHA) 所頒布的 **46** 項高度關注物質 (SVHC) 濃度均小於 0.1% (w/w)。

The thresholds and substances of SVHC are defined in Article 7 and 57 of Regulation (EC) No 1907/2006 (REACH Regulation).

本報告中的高度關注物質的限值與定義是依據 (EC) NO 1907/2006 法規 (REACH) 第 7 節與第 57 節所規定。

According to the REACH regulation, the Candidate List of SVHC is proposed and evaluated by European Chemicals Agency (ECHA) and may subject to change in the further. So far, there are total **46** SVHC in this list. The applicant should be ready to note that the latest list.

根據 REACH 法規的規定，高度關注物質 (SVHC) 清單是由歐盟化學總署 (ECHA) 進行建議與評估，而且這份清單在未來是可以被修訂的，目前為止，總共有 **46** 項的高度關注物質在本清單中，申請者應隨時注意這份清單的最新狀況。

Please refer to below information for the detail.

如需了解更詳細內容，請參考以下網址。

[http://echa.europa.eu/chem\\_data/authorisation\\_process/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp)

Authorized By:  
On Behalf Of Intertek Testing Services  
Taiwan Limited



K. Y. Liang  
Director

This report shall not be reproduced  
except in full, without the written  
approval of the laboratory.



Number : TWNC00189612

Test Conducted

(I) Testing Result Summary 測試結果:

1. For Compound determined by ICP-OES 以感應耦合電漿原子放射光譜儀測試的成分

- Testing method : By Intertek in-housing method 以 Intertek 內部方法  
 測試方法
- Acid digestion method was used and the relevant elements were determined by ICP-OES. The relevant elements include Cobalt(Co), Arsenic(As), Lead(Pb), Chromium(Cr), Molybdenum(Mo) and Tin(Sn).  
 以酸解法消化測試樣品並用感應耦合電漿原子放射光譜儀分析相關元素 Cobalt(Co) 鈷, Arsenic(As) 砷, Lead(Pb) 鉛, Chromium(Cr) 鉻, Molybdenum(Mo) 鉬, Tin(Sn) 錫。
  - Further confirmation test will be performed by UV-Vis (non-metal part) or spot test (metal part) for Cr<sup>6+</sup> if necessary.  
 必要時，六價鉻確認分析方法：非金屬元件 - 紫外光-可見光分光光度計分析，金屬元件 - 點測試法。
  - Further confirmation test will be performed by GC-MS for Tributyltin (TBT) if necessary.  
 必要時，以溶劑萃取並用氣相層析-質譜儀分析三丁基錫(TBT)。

Compound 成分	Result 結果 (ppm)
	Transparent Plastic Pellets 透明塑膠粒
Cobalt Dichloride 二氯化鈷	ND
Diarsenic Pentaoxide 五氧化二砷	ND
Diarsenic Trioxide 三氧化二砷	ND
Lead Hydrogen Arsenate 砷酸氫鉛	ND
Triethyl Arsenate 三乙基砷酸酯	ND
Sodium Dichromate, Dihydrate 鉻酸鈉二水合物	ND
Bis (Tributyltin) Oxide (TBTO) 氧化三丁基錫	ND
Lead Chromate 鉻酸鉛	ND
Lead Chromate Molybdate Sulphate Red (C.I. Pigment Red 104) 紅色鉬鉻酸鉛硫酸鹽 (C.I.紅色 104)	ND
Lead Sulfochromate Yellow (C.I. Pigment Yellow 34) 黃色硫化鉻酸鉛 (C.I.黃色 34)	ND
Sodium Chromate 鉻酸鈉	ND
Potassium Chromate 鉻酸鉀	ND
Ammonium Dichromate 重鉻酸銨	ND
Potassium Dichromate 重鉻酸鉀	ND
Cobalt(II) Sulphate 硫酸鈷(II)	ND
Cobalt(II) Dinitrate 硝酸鈷(II)	ND
Cobalt(II) Carbonate 碳酸鈷(II)	ND
Cobalt(II) Diacetate 醋酸鈷(II)	ND
Chromium Trioxide 三氧化鉻	ND
Acids generated from chromium trioxide and their oligomers 由三氧化鉻和其他低聚物形成的酸類	ND

## Test Conducted

(I) Testing Result Summary 測試結果:

2. For Compound determined by GC-MS 以氣相層析-質譜儀分析測試的成分

Testing method : By Intertek in-housing method 以 Intertek 內部方法  
 測試方法
 

- Organic solvent extraction method was used and the relevant SVHC were determined by GC-MS.  
 以溶劑萃取並用氣相層析-質譜儀分析。

Compound 成分	Result 結果 (ppm)
	Transparent Plastic Pellets 透明塑膠粒
Anthracene 蒽	ND
4,4-Diaminodiphenylmethane (MDA) 4,4'-二氨基二苯甲烷	ND
Dibutyl Phthalate (DBP) 二丁基鄰苯二甲酸酯	ND
5-Tert-Butyl-2,4,6-Trinitro-M-Xylene (Musk Xylene) 麝香二甲苯	ND
Bis (2-Ethylhexyl) Phthalate (DEHP) 二(2-乙基己基)鄰苯二甲酸酯	ND
Hexabromocyclododecane (HBCDD) 六溴環十二烷	ND
Benzyl Butyl Phthalate (BBP) 丁基苯基鄰苯二甲酸酯	ND
Anthracene Oil 蒽油	ND
Anthracene Oil, Anthracene Paste, Distn. Lights 蒽油, 蒽糊, 輕油	ND
Anthracene Oil, Anthracene Paste, Anthracene Fraction 蒽油, 蒽糊, 蒽餾分離液	ND
Anthracene Oil, Anthracene-Low 蒽油, 含蒽量少	ND
Anthracene Oil, Anthracene Paste 蒽油, 蒽糊	ND
Pitch, Coal Tar, High Temp. 煤瀝青, 高溫	ND
Acrylamide 丙烯醯胺	ND
2,4-Dinitrotoluene 2,4-二硝基甲苯	ND
Diisobutyl Phthalate (DiBP) 鄰苯二甲酸二異丁酯	ND
Tris (2-Chloroethyl) Phosphate 三 2-(氯乙基) 磷酸酯	ND



Number : TWNC00189612

Test Conducted

(I) Testing Result Summary 測試結果:

3. For Compound determined by GC-ECD 以氣相層析-電子捕捉偵測器測試的成分

Testing method : By Intertek in-housing method 以 Intertek 內部方法  
 測試方法           ▪ Organic solvent extraction method was used and the relevant SVHC was determined by GC-ECD.  
                           以溶劑萃取並用氣相層析-電子捕捉偵測器分析。

Compound 成分	Result 結果 (ppm)
	Transparent Plastic Pellets 透明塑膠粒
Short Chain Chlorinated Parafins (C10-C13) 短鏈氯化石蠟	ND

4. For Ceramic Fiber 陶瓷纖維

Testing method : By Intertek in-housing method 以 Intertek 內部方法  
 測試方法           ▪ Acid digestion method was used and the relevant element Aluminum (Al) was determined by ICP-OES.  
                           以酸解法消化測試樣品並用感應耦合電漿原子放射光譜儀分析相關元素 Aluminum (Al)。  
                           ▪ Further screening test will be performed by ED-XRF or SEM-EDX for ceramic fiber after decomposition if necessary.  
                           必要時，以 ED-XRF 或 SEM-EDX 掃描陶瓷纖維成分。

Compound 成分	Result 結果 (ppm)
	Transparent Plastic Pellets 透明塑膠粒
Aluminosilicate Refractory Ceramic Fibres 矽酸鋁, 陶瓷耐火纖維	ND
Zirconia Aluminosilicate, Refractory Ceramic Fibres 矽酸鋁氧化鋯, 陶瓷耐火纖維	ND

5. For Compound determined by HS-GC-MS 以氣相層析-質譜儀連接頂空進樣器測試的成分

Testing method : By Intertek in-housing method 以 Intertek 內部方法  
 測試方法           ▪ The relevant SVHC was determined by GC-MS linked with Headspace.  
                           以氣相層析-質譜儀連接頂空進樣器分析。

Compound 成分	Result 結果 (ppm)
	Transparent Plastic Pellets 透明塑膠粒
Trichloroethylene 三氯乙烯	ND
2-Methoxyethanol 2-甲氧基乙醇	ND
2-Ethoxyethanol 2-乙氧基乙醇	ND



Number : TWNC00189612

Test Conducted

(I) Testing Result Summary 測試結果:

6. For Bronic Compounds 含硼化合物

Testing method : By Intertek in-housing method 以 Intertek 內部方法  
 測試方法

- Aqueous solvent extraction method was used and the relevant element was determined by ICP-OES. The relevant elements include Boron(B) and Sodium(Na).  
 以去離子水萃取樣品並用感應耦合電漿原子放射光譜儀分析相關元素 Boron(B) 與 Sodium(Na)。

Compound 成分	Result 結果 (ppm)
	Transparent Plastic Pellets 透明塑膠粒
Boric Acid 硼酸	ND
Disodium Tetraborate, Anhydrous 無水四硼酸二鈉	ND
Tetraboron Disodium Heptaoxide, Hydrate 含水七氧化四硼酸二鈉	ND

Remarks: ppm = Parts per million based on weight of tested sample  
 = 百萬分之一，依據測試樣品重量計算

備註 ND = Not detected = 未檢測出

Detection Limit = 100 ppm (for each compound) = 偵測極限 (每一個成份)

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Cobalt Dichloride 二氯化鈷		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類		
EC number:	231-589-4	CAS number:	7646-79-9
Common Uses 用途:	Detection of moisture, for example, "cobalt chloride paper" has been used to detect the presence of water. 用於二氯化鈷試紙(含水量)。		

Substance Name 物質名稱:	Diarsenic Pentaoxide 五氧化二砷		
Classification 毒性分類:	Carcinogen Cat 1 致癌性 第一類		
EC number:	215-116-9	CAS number:	1303-28-2
Common Uses 用途:	Manufacture of arsenates, weed killer, metal adhesives, insecticides, fungicides or wood preservatives. 用於生產除草劑、金屬粘著劑或木頭防腐劑。		

Substance Name 物質名稱:	Diarsenic Trioxide 三氧化二砷		
Classification 毒性分類:	Carcinogen Cat 1 致癌性 第一類		
EC number:	215-481-4	CAS number:	1327-53-3
Common Uses 用途:	Be used in metal alloys and glass or wood preservative. 用於金屬、玻璃處理劑或木頭防腐劑。		

Substance Name 物質名稱:	Lead Hydrogen Arsenate 砷酸氫鉛		
Classification 毒性分類:	Carcinogen Cat 1 致癌性 第一類; Toxic For Reproduction Cat 1 致生殖毒性 第一類		
EC number:	232-064-2	CAS number:	7784-40-9
Common Uses 用途:	Be used in pesticides and wood preservatives. 用於農藥生產或木頭防腐劑。		

Substance Name 物質名稱:	Triethyl Arsenate 三乙基砷酸酯		
Classification 毒性分類:	Carcinogen Cat 1 致癌性 第一類		
EC number:	427-700-2	CAS number:	15606-95-8
Common Uses 用途:	Manufacture of semiconductors and be used in the production of wood preservatives. 用於半導體材料或木頭防腐劑。		

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Sodium Dichromate, Dihydrate 鉻酸鈉二水合物		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Mutagen Cat 2 致誘變 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	234-190-3	CAS number:	7789-12-0
Common Uses 用途:	Be used in metal finishing process, leather tanning or in some ceramics / glasses. 用於金屬表面處理、皮革鞣製劑或陶瓷/玻璃製品。		

Substance Name 物質名稱:	Bis (Tributyltin) Oxide (TBTO) 氧化三丁基錫		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性的物質		
EC number:	200-268-0	CAS number:	56-35-9
Common Uses 用途:	Be used as a biocide in marine anti-fouling paints or antimicrobial agent. 用於船底的抗附著劑或抗菌劑。		

Substance Name 物質名稱:	Anthracene 蒽		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性的物質		
EC number:	204-371-1	CAS number:	120-12-7
Common Uses 用途:	Be used in dye manufacture, used in pyrotechnics to create black smoke. 用於生產染料或煙火中的碳黑。		

Substance Name 物質名稱:	4,4-Diaminodiphenylmethane (MDA) 4,4'-二氨基二苯甲烷		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類		
EC number:	202-974-4	CAS number:	101-77-9
Common Uses 用途:	Be used as an amine hardener for epoxy resins, adhesives, coatings or AZO dyes. 用於當偶氮染料。		

Substance Name 物質名稱:	Dibutyl Phthalate (DBP) 二丁基鄰苯二甲酸酯		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	201-557-4	CAS number:	84-74-2
Common Uses 用途:	Be used as a plasticizer in PVC, rubber, sealants, adhesives and paints. 用於 PVC、橡膠、密風劑、粘劑或塗料的可塑劑		

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	5-Tert-Butyl-2,4,6-Trinitro-M-Xylene (Musk Xylene) 麝香二甲苯		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Mutagen Cat 2 致誘變 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	201-329-4	CAS number:	81-15-2
Common Uses 用途:	Be used as a fragrance in cosmetics, detergents, fabric softeners and household cleaning products. 用於化妝品、洗潔劑、紡織品柔軟劑或家用清潔劑的香精。		

Substance Name 物質名稱:	Bis (2-Ethylhexyl) Phthalate (DEHP) 二(2-乙基己基)鄰苯二甲酸酯		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	204-211-0	CAS number:	117-81-7
Common Uses 用途:	Be used as a plasticizer for PVC from fabric, tubing, adult and children's toys, engineering, medical devices, electronics and electrical and novelty products sectors. 用於 PVC 製造的紡織品、軟管或成人與小孩的玩具、工程或醫學設備橡膠的可塑劑、電子電器產品的可塑劑。		

Substance Name 物質名稱:	Hexabromocyclododecane (HBCDD) 六溴環十二烷		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質		
EC number:	247-148-4 221-695-9	CAS number:	25637-99-4 3194-55-6
Common Uses 用途:	Be used as a flame retardant for plastics (polystyrene) and fibers (clothing and furniture textiles) from electronics and toys. 用於電子或玩具產品的塑膠(PS)、紡織品(衣物或傢飾布)的阻燃劑。		

Substance Name 物質名稱:	Benzyl Butyl Phthalate (BBP) 丁基苯基鄰苯二甲酸酯		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	201-622-7	CAS number:	85-68-7
Common Uses 用途:	Be used as a plasticizer for PVC, rubber, sealants, adhesives and paints. 用於 PVC、橡膠、密風劑、粘劑或塗料的可塑劑。		

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Short Chain Chlorinated Parafins (C10-C13) 短鏈氯化石蠟		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質; Very Persistent And Very Bioaccumulative 高持久性、生物累積性物質		
EC number:	287-476-5	CAS number:	85535-84-8
Common Uses 用途:	Be used as a secondary plasticizer used in PVC formulations, metal working lubricants and leather liquor. 用於 PVC 第二級增塑劑、金屬加工潤滑劑或皮革處理劑。		
Substance Name 物質名稱:	Anthracene Oil 蒽油		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質; Very Persistent And Very Bioaccumulative 高持久性、生物累積性物質; Carcinogen Cat 2 <sup>1)</sup> 致癌性 第二類 <sup>1)</sup>		
EC number:	292-602-7	CAS number:	90640-80-5
Common Uses 用途:	Be used in the manufacture of anthracene and carbon black, reducing agents in blast furnaces, as components in bunker fuel, for impregnating, sealing and corrosion protection. 可用於製造蒽和炭黑，高溫爐還原劑，燃料成分，浸漬劑，密封和防腐蝕保護。		
Substance Name 物質名稱:	Anthracene Oil, Anthracene Paste, Distn. Lights 蒽油, 蒽糊, 輕油		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質; Very Persistent And Very Bioaccumulative 高持久性、生物累積性物質; Carcinogen Cat 2 <sup>2)</sup> 致癌性 第二類 <sup>2)</sup> ; Mutagen Cat 2 <sup>3)</sup> 致誘變 第二類 <sup>3)</sup>		
EC number:	295-278-5	CAS number:	91995-17-4
Common Uses 用途:	Uses are believed to be the Same As for Anthracene Oil. 同蒽油。		
Substance Name 物質名稱:	Anthracene Oil, Anthracene Paste, Anthracene Fraction 蒽油, 蒽糊, 蒽餾分離液		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質; Very Persistent And Very Bioaccumulative 高持久性、生物累積性物質; Carcinogen Cat 2 <sup>2)</sup> 致癌性 第二類 <sup>2)</sup> ; Mutagen Cat 2 <sup>3)</sup> 致誘變 第二類 <sup>3)</sup>		
EC number:	295-275-9	CAS number:	91995-15-2
Common Uses 用途:	Uses are believed to be the Same As for Anthracene Oil. 同蒽油。		

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Anthracene Oil, Anthracene-Low 蒽油, 含蒽量少		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質; Very Persistent And Very Bioaccumulative 高持久性、生物累積性物質; Carcinogen Cat 2 <sup>2)</sup> 致癌性 第二類 <sup>2)</sup> ; Mutagen Cat 2 <sup>3)</sup> 致誘變 第二類 <sup>3)</sup>		
EC number:	292-604-8	CAS number:	90640-82-7
Common Uses 用途:	Uses are believed to be the Same As for Anthracene Oil. 同蒽油。		

Substance Name 物質名稱:	Anthracene Oil, Anthracene Paste 蒽油, 蒽糊		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質; Very Persistent And Very Bioaccumulative 高持久性、生物累積性物質; Carcinogen Cat 2 <sup>2)</sup> 致癌性 第二類 <sup>2)</sup> ; Mutagen Cat 2 <sup>3)</sup> 致誘變 第二類 <sup>3)</sup>		
EC number:	292-603-2	CAS number:	90640-81-6
Common Uses 用途:	Uses are believed to be the Same As for Anthracene Oil. 同蒽油。		

Substance Name 物質名稱:	Pitch, Coal Tar, High Temp. 煤瀝青, 高溫		
Classification 毒性分類:	Persistent, Bioaccumulative And Toxic 持久性、生物累積性、毒性物質; Very Persistent And Very Bioaccumulative 高持久性、生物累積性物質; Carcinogen Cat 2 致癌性 第二類		
EC number:	266-028-2	CAS number:	65996-93-2
Common Uses 用途:	Be used in the production of electrodes, heavy duty corrosion, paving 用於電極生產、潤滑油、鋪路。		

Substance Name 物質名稱:	Acrylamide 丙烯醯胺		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Mutagen Cat 2 致誘變 第二類		
EC number:	201-173-7	CAS number:	79-06-1
Common Uses 用途:	Be used for the synthesis of polyacrylamides. 用於合成聚丙烯醯胺塑膠。		

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	2,4-Dinitrotoluene 2,4-二硝基甲苯		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類		
EC number:	204-450-0	CAS number:	121-14-2
Common Uses 用途: Be used in the production of toluene diisocyanate, as gelatinizing-plasticizing agent for the manufacture of explosive mixtures 用於生產異氰酸鹽、火藥使用凝膠的增塑劑。			

Substance Name 物質名稱:	Diisobutyl Phthalate (DiBP) 鄰苯二甲酸二異丁酯		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	201-553-2	CAS number:	84-69-5
Common Uses 用途: Be used as plasticizer and a gelling aid in combination 用於塑膠可塑劑或凝膠增塑劑。			

Substance Name 物質名稱:	Tris(2-Chloroethyl) Phosphate 三 2-(氯乙基)磷酸酯		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	204-118-5	CAS number:	115-96-8
Common Uses 用途: Be used as an additive plasticiser and viscosity regulator with flame-retarding properties for acrylic resins, polyurethane, polyvinyl chloride and other polymers. 可用作丙烯酸樹脂，聚氨酯，聚氯乙烯等聚合物的增塑劑和粘度調節劑和阻燃劑。			

Substance Name 物質名稱:	Aluminosilicate Refractory Ceramic Fibres 矽酸鋁，陶瓷耐火纖維		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類		
EC number:	--	CAS number:	--
Common Uses 用途: Be used for high-temperature insulation and fire protection. 用於高溫隔熱與防火。			

Substance Name 物質名稱:	Zirconia Aluminosilicate, Refractory Ceramic Fibres 矽酸鋁氧化鋯，陶瓷耐火纖維		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類		
EC number:	--	CAS number:	--
Common Uses 用途: Be used for high-temperature insulation and fire protection. 用於高溫隔熱與防火。			

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Lead Chromate 鉻酸鉛		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Toxic For Reproduction Cat 1 致生殖毒性 第一類		
EC number:	231-846-0	CAS number:	7758-97-6
Common Uses 用途:	Be used for manufacturing pigments and dyes, as a detergents and bleaches, photosensitive materials and for the manufacture of pyrotechnic powder. 用於生產顏料和染料、洗滌劑、漂白劑、感光材料和製造煙火。		

Substance Name 物質名稱:	Lead Chromate Molybdate Sulphate Red (C.I. Pigment Red 104) 紅色鉬鉻酸鉛硫酸鹽(C.I.紅色 104)		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Toxic For Reproduction Cat 1 致生殖毒性 第一類		
EC number:	235-759-9	CAS number:	12656-85-8
Common Uses 用途:	Be used as a colouring, painting and coating agent in sectors such as the rubber, plastic and paints, coatings and varnishes industries. 用於橡膠，塑料，油漆，塗料，油漆等行業的色料、油漆和塗料原料。		

Substance Name 物質名稱:	Lead Sulfochromate Yellow (C.I. Pigment Yellow 34) 黃色硫化鉻酸鉛 (C.I.黃色 34)		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Toxic For Reproduction Cat 1 致生殖毒性 第一類		
EC number:	215-693-7	CAS number:	1344-37-2
Common Uses 用途:	Be used as a colouring, painting and coating agent in sectors such as the rubber, plastic and paints, coatings and varnishes industries. 用於橡膠，塑料，油漆，塗料，油漆等行業的色料、油漆和塗料原料。		

Substance Name 物質名稱:	Trichloroethylene 三氯乙烯		
Classification 毒性分類:	Carcinogenic Cat 2 致癌性 第二類		
EC number:	201-167-4	CAS number:	79-01-6
Common Uses 用途:	Cleaning and degreasing of metal parts. Solvent in adhesives. Intermediate in the manufacture of chlorinated and fluorinated organic compounds. 清洗和除油金屬零件。粘膠溶劑。製造氯化和氟化有機化合物的中間體。		

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Boric Acid 硼酸		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	233-139-2 234-343-4	CAS number:	10043-35-3 11113-50-1
Common Uses 用途:	Uses include a multitude of applications, e,g, in biocides and preservatives, personal care products, food additives, glass, ceramics, rubber, fertilisers, flame retardants, paints, industrial fluids, brake fluids, soldering products, film developers. 有多種用途，例如：殺蟲劑、防腐劑、個人清潔用品、食品添加劑、玻璃、陶瓷、橡膠、肥料、防火材料、塗料、工業溶劑、煞車油、焊料等。		
Substance Name 物質名稱:	Disodium Tetraborate, Anhydrous 無水四硼酸二鈉		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	215-540-4	CAS number:	1330-43-4 12179-04-3 1303-96-4
Common Uses 用途:	Uses are the Same As for Boric Acid. 用途同硼酸。		
Substance Name 物質名稱:	Tetraboron Disodium Heptaoxide, Hydrate 含水七氧化四硼酸二鈉		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	235-541-3	CAS number:	12267-73-1
Common Uses 用途:	Uses are the Same As for Boric Acid. 用途同硼酸。		
Substance Name 物質名稱:	Sodium Chromate 鉻酸鈉		
Classification 毒性分類:	Carcinogenic Cat 2 致癌性 第二類; Mutagenic Cat 2 致誘變 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	231-889-5	CAS number:	7775-11-3
Common Uses 用途:	Laboratory analytical agent and manufacture of other chromium compounds. 用於實驗室分析藥劑與製造其他鉻化合物。		
Substance Name 物質名稱:	Potassium Chromate 鉻酸鉀		
Classification 毒性分類:	Carcinogenic Cat 2 致癌性 第二類; Mutagenic Cat 2 致誘變 第二類		
EC number:	232-140-5	CAS number:	7789-00-6
Common Uses 用途:	Treatment and coating of metals, manufacture of reagents and chemicals, manufacture of textiles and colouring agent in ceramics. Tanning and dressing of leather. Manufacture of pigments/inks Laboratory (analytical reagent). 金屬的表面處理和塗層、試劑及化學品製造、紡織品製造、陶瓷上色、皮革裝飾、塗料/墨水製造、實驗室分析用、煙火製造。		

Test Conducted

(II) Common Uses of Substances 候選物質的用途:

Substance Name 物質名稱:	Ammonium Dichromate 重鉻酸胺		
Classification 毒性分類:	Carcinogenic Cat 2 致癌性 第二類; Mutagenic Cat 2 致誘變 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	232-143-1	CAS number:	7789-09-5
Common Uses 用途: Oxidising agent, laboratory (analytical agent), tanning of leather, manufacture of textiles, manufacture of photosensitive screens (cathode ray tubes) and metal treatment. 用於氧化劑、實驗室分析用、皮革鞣劑、紡織品製造、感光燈管(陰極燈管)、金屬表面處理。			

Substance Name 物質名稱:	Potassium Dichromate 重鉻酸鉀		
Classification 毒性分類:	Carcinogenic Cat 2 致癌性 第二類; Mutagenic Cat 2 致誘變 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	231-906-6	CAS number:	7778-50-9
Common Uses 用途: Chrome metal manufacturing, treatment and coating of metals, manufacture of reagents and chemicals, laboratory (analytical agent), cleaning of laboratory glassware, tanning of leather, manufacture of textiles, photolithography, wood treatment, and corrosion inhibitor in cooling systems. 鉻金屬製造、金屬加工塗佈、試劑及化學品製造、實驗室分析用、製革劑、紡織品製造、照相印刷用、冷卻系統中防腐蝕劑。			

- Remarks: 備註
- 1) = The substance does not meet the criteria for identification as a carcinogen in situations where it contains less than 0.005 % (w/w) benzo[a]pyrene.  
當物質的benzo[a]pyrene低於0.005 % (w/w)時，該物質不被視為致癌物質。
  - 2) = The substance does not meet the criteria for identification as a carcinogen in situations where it contains less than 0.005 % (w/w) benzo[a]pyrene and less than 0,1 % w/w benzene.  
當物質的benzo[a]pyrene低於0.005 % (w/w)以及benzene低於0,1 % w/w時，該物質不被視為致癌物質。
  - 3) = The substance does not meet the criteria for identification as a mutagen in situations where it contains less than 0,1 % w/w benzene.  
當物質的benzene低於0,1 % w/w時，該物質不被視為致誘變物質。

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Cobalt(II) Sulphate		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	233-334-2	CAS number:	10124-43-3
Common Uses 用途: Mainly used in the production of other chemicals. Further applications may include manufacture of catalysts and driers, surface treatments (such as electroplating), corrosion prevention, production of pigments, decolourising (in glass, pottery), batteries, animal food supplement, soil fertilizer, and others. 主要用在其他化學品的製造。或是製造催化劑和乾燥劑、表面處理(電鍍)、防腐蝕、製造染料、玻璃或陶瓷脫色、電池、肥料...			

Substance Name 物質名稱:	Cobalt(II) Dinitrate 硝酸鈷(II)		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	233-402-1	CAS number:	10141-05-6
Common Uses 用途: Mainly used in the production of other chemicals and the manufacture of catalysts. Further applications may include surface treatment and batteries. 主要用於其他化學品或催化劑的製造。其他用途有可能包括表面處理和製造電池。			

Substance Name 物質名稱:	Cobalt(II) Carbonate 碳酸鈷(II)		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	208-169-4	CAS number:	513-79-1
Common Uses 用途: Mainly used in the manufacture of catalysts. Minor uses may include feed additive, production of other chemicals, production of pigments, and adhesion (in ground coat frit). 主要用於催化劑製造。小部分用於飼料添加物、製造其他化學品、染料製造以及底釉的黏著劑。			

Substance Name 物質名稱:	Cobalt(II) Diacetate 醋酸鈷(II)		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類; Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	200-755-8	CAS number:	71-48-7
Common Uses 用途: Mainly used in the manufacture of catalysts. Minor uses may include production of other chemicals, surface treatment, alloys, production of pigments, dyes, rubber adhesion, and feed additive. 主要用於催化劑製造。小部分用於製造其他化學品或合金、表面處理、染料塗料製造、橡膠黏著劑和飼料添加物。			

## Test Conducted

(II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	Chromium Trioxide 三氧化鉻		
Classification 毒性分類:	Carcinogen Cat 1 致癌性 第一類; Mutagen Cat 2 致誘變 第二類		
EC number:	215-607-8	CAS number:	1333-82-0
Common Uses 用途: Used for metal finishing and as fixing agent in waterborne wood preservatives. 用於金屬加工、水溶性木材防腐劑			

Substance Name 物質名稱:	Acids generated from chromium trioxide and their oligomers 由三氧化鉻和其他低聚物形成的酸類： <ul style="list-style-type: none"> <li>• Chromic acid 鉻酸</li> <li>• Dichromic acid 重鉻酸</li> <li>• Oligomers of chromic acid and dichromic acid 鉻酸和重鉻酸的低聚物</li> </ul>		
Classification 毒性分類:	Carcinogen Cat 2 致癌性 第二類		
EC number:	231-805-5 236-881-5 --	CAS number:	7738-94-5 13530-68-2 --
Common Uses 用途: These acids and their oligomers are generated when chromium trioxide is dissolved in water. Chromium trioxide is mainly used in form of aqueous solutions. Consequently, the uses of these substances are the same as indicated for chromium trioxide. 當三氧化鉻溶於水中時，將形成這些酸和它們的低聚物。三氧化鉻主要的用途是製造水溶性溶液而通常這些物質的用途和三氧化鉻差不多。			

Substance Name 物質名稱:	1,2,3-Trichlorobenzene 1,2,3-三氯苯		
Classification 毒性分類:	PBT 持久性、生物累積性、毒性物質		
EC number:	201-757-1	CAS number:	87-61-6
Common Uses 用途: Uses are believed to be the same as for 1,2,4-Trichlorobenzene. 與 1,2,4-三氯苯 相同。			

Substance Name 物質名稱:	1,2,4-Trichlorobenzene 1,2,4-三氯苯		
Classification 毒性分類:	PBT 持久性、生物累積性、毒性物質		
EC number:	204-428-0	CAS number:	120-82-1
Common Uses 用途: There is a restriction in force prohibiting the placing on the market or use as a substance or in mixtures in a concentration $\geq 0.1\%$ except for use as intermediate for synthesis and as process solvent in closed systems. Mainly used as intermediate and as a process solvent in closed systems. The substance may occur in imported articles. 現在已有法規限制此物質的使用，已在市面銷售的原料或是配製品其濃度不得超過 0.1%，除非該物質是作為中間體或是密閉系統的溶劑。			

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途：

Substance Name 物質名稱:	1,3,5-Trichlorobenzene 1,3,5-三氯苯		
Classification 毒性分類:	PBT 持久性、生物累積性、毒性物質		
EC number:	108-70-3	CAS number:	108-70-3
Common Uses 用途:	Uses are believed to be the same as for 1,2,4-Trichlorobenzene. 與 1,2,4-三氯苯 相同。		

Substance Name 物質名稱:	2-Methoxyethanol 2-甲氧基乙醇		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	203-713-7	CAS number:	109-86-4
Common Uses 用途:	Mainly used as solvent, chemical intermediate and additive for fuels. 主要用於溶劑、化學品中間體以及燃料添加劑		

Substance Name 物質名稱:	2-Ethoxyethanol 2-乙氧基乙醇		
Classification 毒性分類:	Toxic For Reproduction Cat 2 致生殖毒性 第二類		
EC number:	203-804-1	CAS number:	110-80-5
Common Uses 用途:	Mainly used as solvent and chemical intermediate. 主要用於溶劑、化學品中間體。		

## 1. Substances of very high concern (SVHC) are classified as:

下列物質將被歸類為高度關注物質 (SVHC)

- carcinogenic, mutagenic or toxic to reproduction chemicals category 1 (proven on humans) and category 2 (proven on animals)  
第 1 和 2 類致癌、致誘變、致生殖毒性物質
- persistent, bioaccumulative and toxic chemicals (PBT)  
持久性、生物累積性、毒性物質
- very persistent and very bioaccumulative chemicals (VPVB)  
高持久性、生物累積性物質
- other similar substances such as endocrine disruptors  
其他類似物質 (如：擾亂內分泌物質)

## 2. If the imported or manufactured volume of each individual SVHC is more than 0.1% and if it exceeds 1 tonne per year across all product ranges, then importer or manufacturer require notification to the European Chemical Agency (ECHA). Notification should be done by June 2011, which is 4 years after REACH has been implemented.

進口商或生產者如果進口或生產含有任何高度關注物質濃度超過 0.1% 且該高度關注物質年度進口量或生產量大於 1 噸者，必須向歐盟化學總署 (ECHA) 進行通報，該通報須於 2011 年六月完成 (REACH 施行後四年)。

## Test Conducted

## (II) Common Uses of Substances 候選物質的用途:

3. According to article 7 of regulation (EC) NO 1907/2006 (REACH), If a substance meets the criteria in article 57 and is identified in accordance with article 59(1). The following information is submitted for notification:

依據 (EC) NO 1907/2006 法規 (REACH) 第 7 條規定，當物質符合第 57 條規定且經過第 59 條確認為 SVHC 時，進口商或生產者進行通報時需提供以下資料：

- identification of the registrant and the substance  
註冊者與被通報物質的確認資料
- classification and labelling of the substance  
被通報物質的危險分類與標示
- description of use of the substance and the article  
被通報物質與物品的使用說明
- registration number, if available  
註冊號碼 (如果已執行註冊的話)
- tonnage range  
年度進口或生產的噸數

4. According to article 33 of regulation (EC) NO 1907/2006 (REACH), If the SVHC in an article is more than 0.1% by weight, Then all recipients in the supply chain and those consumers who request for information must be informed to enable safe use.

依據 (EC) NO 1907/2006 法規 (REACH) 第 33 條規定，如果物品含有濃度超過 0.1% 的高度關注物質時，供應者應該通知供應鏈中的使用者與其他消費者如何安全使用該物品

## (III) Disclaimers 聲明:

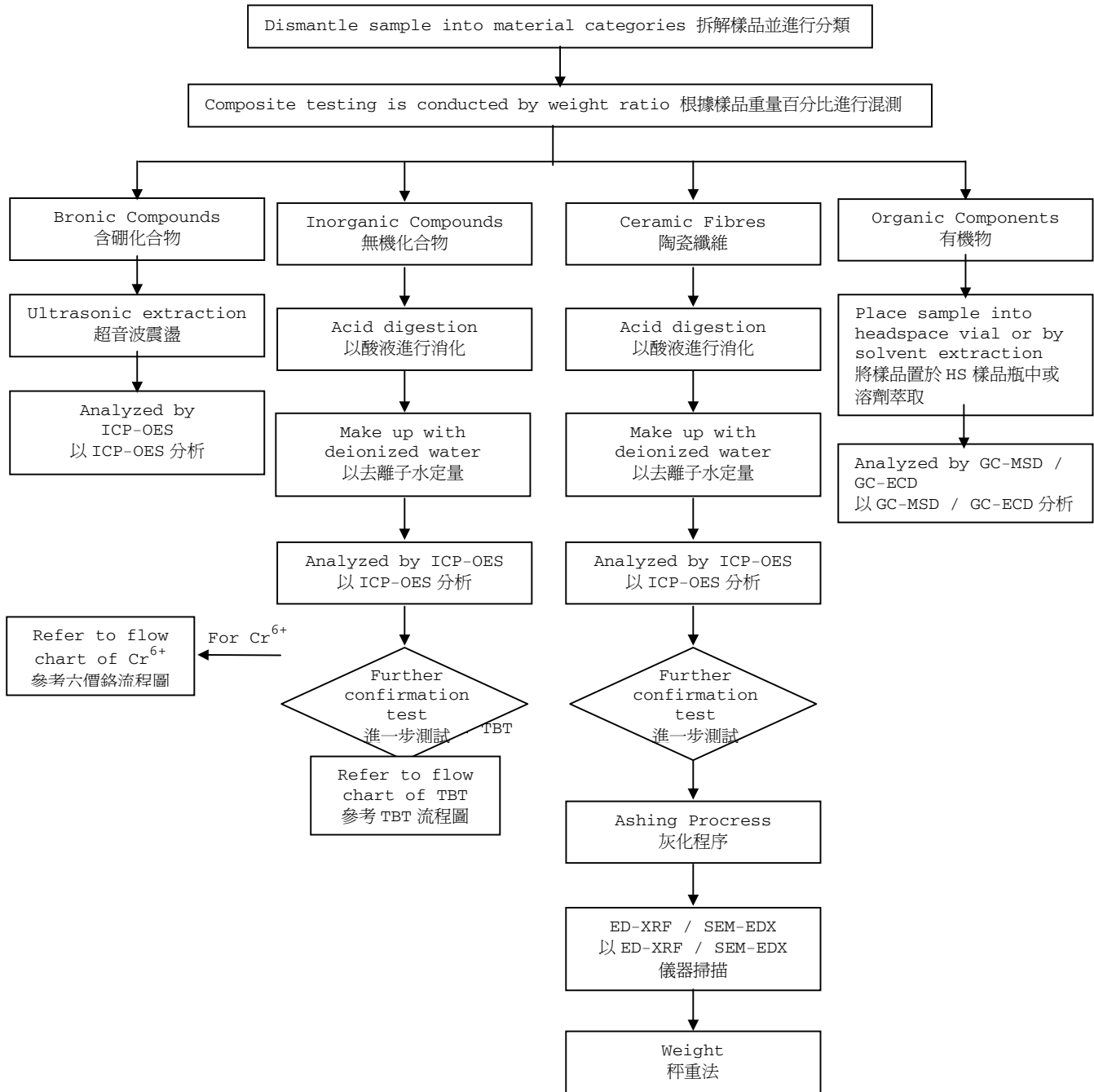
This assessment report for substances of very high concern (SVHC) in candidate list promulgated by European Chemicals Agency (ECHA) is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in assessment report is sufficient for its/his/her purposes. 本評估報告中針對歐盟化學總署 (ECHA) 所建議高度關注物質 (SVHC) 的篩檢結果僅提供申請者作為參考之用，申請者應自行評估本報告中所提供的資訊是否符合其申請的目的。

The screening results shown in this assessment report will be in relation to various factors, including but not limited to, the weight or size of dismantled component and composite test approach, etc. If the contents of SVHC are out of the threshold, further identification is recommended to obtain the information of SVHC in each material.

本報告中的評估結果會受到若干因素干擾，例如：拆解後零件的重量與大小以及混合測試等。因此，如果任何 SVHC 物質超過要求時，建議收集各組件中 SVHC 的含量分佈，以進一步確認物品中 SVHC 的含量。(以上中文翻譯僅供參考，請申請者以英文敘述為主)

Test Conducted

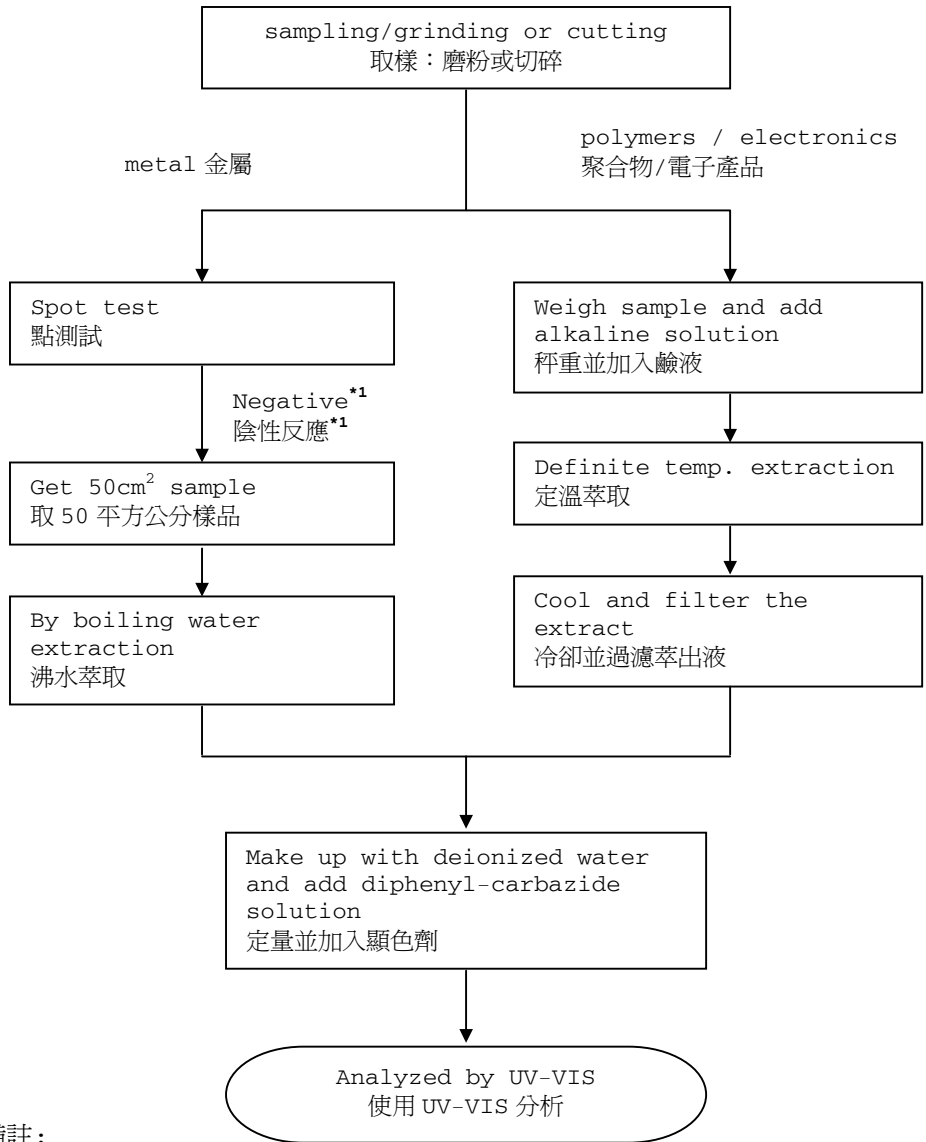
(IV) Measurement Flowchart 測試流程圖:



Test Conducted

(IV) Measurement Flowchart 測試流程圖:

Test For Chromium (VI) Content 六價鉻測試流程圖



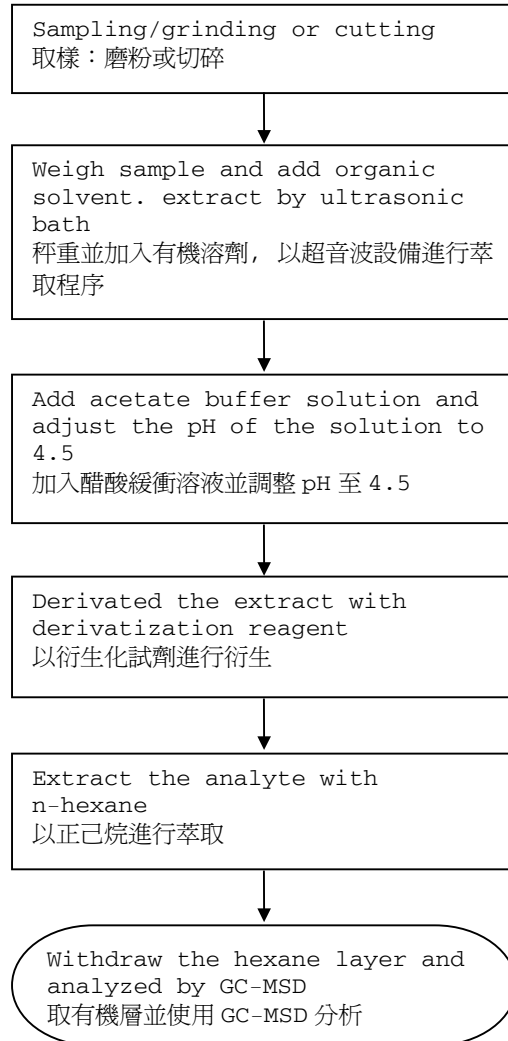
Remark 備註:

\*1: If the result of spot test is positive, Chromium VI would be determined as detected. 若點測試的結果為陽性反應，則直接判定為測試樣品含有六價鉻。

Test Conducted

(IV) Measurement Flowchart 測試流程圖:

Test For Organic Tin Content 有機錫化合物測試流程圖



End Of Report

Test Conducted

Photo

