

FOR APPROVAL

承認書

Messrs. _____

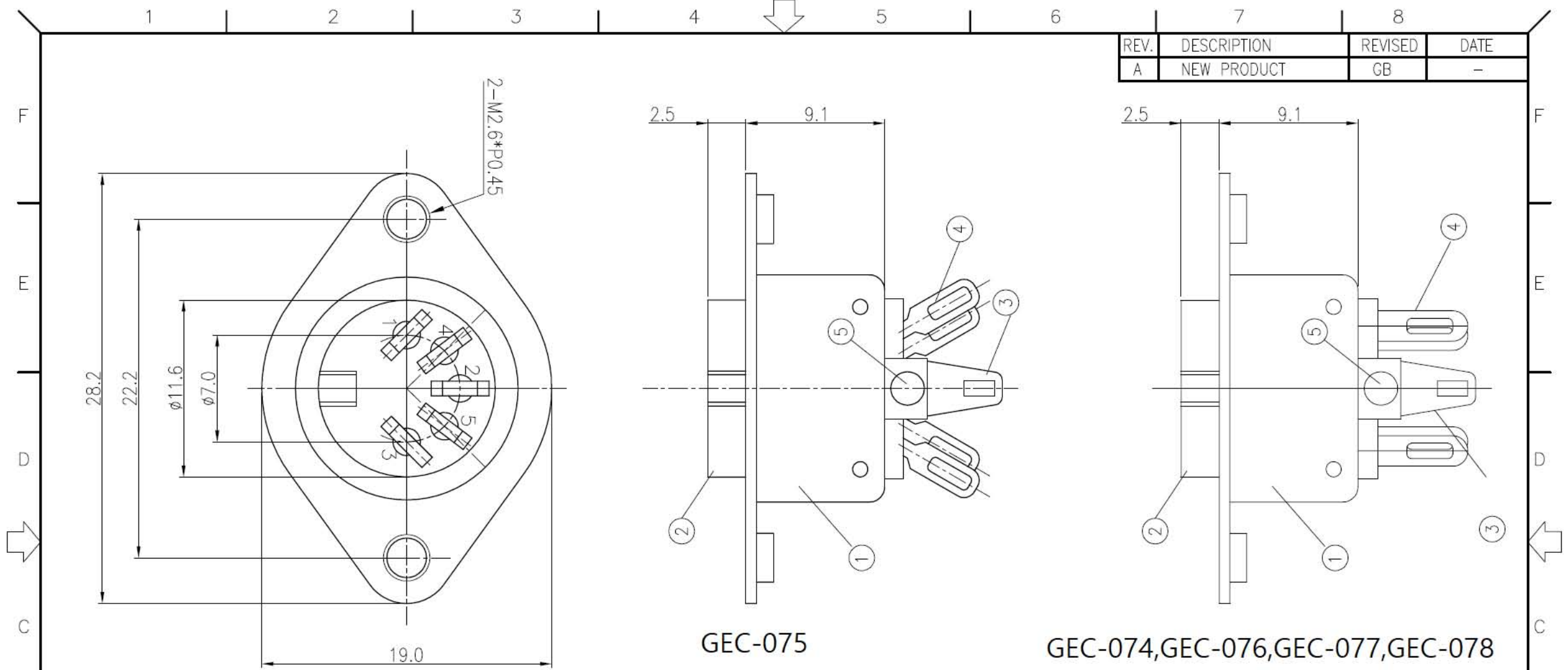
Description 5pin din socket 6pin din socket 8pin din socket

Part No. GEC-074 ,GEC-075 ,GEC-076,GEC-077, GEC-078

Model No. _____ Our Part No. DS-075
DS-076
DS-078

DWNG No. _____ Issue Date: Dec. 12, 2019

Authorized Signature



REV.	DESCRIPTION	REVISED	DATE
A	NEW PRODUCT	GB	-

- SPECIFICATIONS:**
- CONTACT RESISTANCE : 20m OHM MAX.
 - INSULATION RESISTANCE : 300M OHM MIN. AT DC 500V.
 - VOLTAGE WITHSTANDING : AC 1000V FOR ONE MINUTE.
 - INSERTION FORCE : 4.0KG MAX.
 - WITHDRAWAL FORCE : 1 - 3.5KG.
 - Unless other specified, the tolerance is ± 0.2 mm

5	RIVET	1	AL	NICKEL PLATED	N/A
4	CONTACT TERMINAL	4-8	BRASS 0.7T	TIN PLATED	N/A
3	EARTH TERMINAL	1	PBSR-H 0.25T	TIN PLATED	N/A
2	HOUSING	1	P.B.T	BLACK	UL94V-0
1	SOCKET CASE	1	SPCC-SD 0.4T	NICKEL PLATED	N/A

P/N	PART NAME	Q'TY	MATERIAL	PLATING&COLOR	REMARKS
REV. A	APPROVAL BY	CHECKED BY	DRAWN BY	UNITS	
UNLESS OTHERWISE SPECIFIED TOLERANCES		YC.H	DY	Huang	2019.10.31
DECIMALS: X : ± 0.5 X.X : ± 0.3 X.XX : ± 0.2		PROJECTION	PRODUCT	DRWAING NO.	SCALE
ANGLES: X : $\pm 2^\circ$ X.X : $\pm 1'$			4~8PIN DIN SOCKET	DS-074~DS-078	1:1

ARRANGEMENT OF CONTACTS					
NO OF CONTACTS	4	5	6	7	8
MODEL NO	GEC-074	GEC-075	GEC-076	GEC-077	GEC-078

[GEC] Green Electronics Company

iq.ul.com

Component - Plastics [\[guide info\]](#)

E59481

CHANG CHUN PLASTICS CO LTD

7TH FL, 301 SONGKIANG RD, TAIPEI 104 TW

4830

Polybutylene Terephthalate (PBT), glass reinforced, "LONGLITE", furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	3.0-3.2	V-0	0	1	75	75	75

Comparative Tracking Index (CTI): 3

Inclined Plane Tracking (IPT): -

Dielectric Strength (kV/mm): -

Volume Resistivity (10^X ohm-cm): -

High-Voltage Arc Tracking Rate (HVTR): 2

High Volt, Low Current Arc Resis (D495): 7

Dimensional Stability (%): -

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 1987-09-01

Last Revised: 2015-09-17

© 2016 UL LLC

**IEC and ISO Test Methods**

Test Name	Test Method	Units	Thk (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	3.0-3.2	V-0 (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-
ISO Izod Impact	ISO 180	kJ/m ²	-	-
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-

測試報告 Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 1 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as):

送樣廠商(Sample Submitted By) : 長春人造樹脂廠股份有限公司 (CHANG CHUN PLASTICS CO., LTD.)
 樣品名稱(Sample Description) : POLYBUTYLENE TEREPHTHALATE (PBT)
 樣品型號(Style/Item No.) : PBT (4108, 4115, 4115F, 4120, 4130, 4130F, 4140, 4620, 4630, 4730, 4815, 4820, 4830, 4840, 4815G, 4830G)
 收件日期(Sample Receiving Date) : 2018/12/18
 測試期間(Testing Period) : 2018/12/18 to 2018/12/24

測試需求(Test Requested) : 依據客戶指定, 參考REACH之Regulation (EC) No 1907/2006的公告進行以下測試 / As specified by client, the sample(s) was/were tested with reference to Regulation (EC) No 1907/2006 concerning the REACH.
 (1) 191項高關注物質候選清單, 於2018年06月27日公告 / 191 Substances of Very High Concern (SVHC). Candidate list is published on June 27, 2018
 (2) 6項高關注物質建議清單, 於2018年09月04日公告 / 6 Substances of Very High Concern (SVHC). Proposed list is published on September 04, 2018

測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages).
總結(Summary) : 根據歐洲法院對於REACH規範下成品定義的裁決以及指定範圍和分析技術, 送測樣品中所選擇的零部件成品的高關注物質(SVHC) 測試結果濃度均小於0.1%(w/w) / According to the ruling of the Court of Justice of the European Union on the definition of an article under REACH, and the specified scope as well as analytical technique, the test results of the selected component article are $\leq 0.1\%$ (w/w) in the submitted sample(s).

Troy Chang Manager - Tech
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei

測試報告 Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 2 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



測試樣品(Test Sample): 黑色塑膠粒 (BLACK PLASTIC PELLETS)

測試方法(Test Method):

參照SGS內部方法RSTS-EE-SVHC-007. 由感應耦合電漿原子發射光譜儀、紫外光可見光譜儀、氣相層析/質譜儀、液相層析/質譜儀、氣相層析儀/火焰光度偵測器、液相層析/質譜儀/二極體陣列偵測器、超高效能液相層析串聯質譜儀進行分析。(SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES, UV-VIS, GC/MS, LC/MS, GC/FPD, LC/MS/DAD, UPLC-MSMS.)

測試結果 (Test Results)

(1) 高關注物質(SVHC)候選清單 / Candidate List of SVHC (2018/06/27)

No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
1.	4,4' - 二氨基二苯甲烷 / 4,4' - Diaminodiphenylmethane (MDA) (CAS No.: 101-77-9)	0.05	n. d.
2.	二甲苯麝香 / 5-tert-butyl-2,4,6-trinitro- m-xylene (Musk Xylene) (CAS No.: 81-15-2)	0.05	n. d.
3.	短鏈氯化石蠟 / Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (CAS No.: 85535-84-8)	0.05	n. d.
4.	蒽 / Anthracene (CAS No.: 120-12-7)	0.05	n. d.
5.	鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)	0.05	n. d.
6.	氧化雙三丁基錫 / Bis(tributyltin)oxide (TBTO)***(CAS No.: 56-35-9)	-	n. d.
7.	五氧化二砷 / Diarsenic pentaoxide*** (CAS No.: 1303-28-2)	-	n. d.
8.	三氧化二砷 / Diarsenic trioxide*** (CAS No.: 1327-53-3)	-	n. d.
9.	鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	0.05	n. d.
10.	六溴環十二烷及所有主要被辨別出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α - HBCDD, β - HBCDD, γ - HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	0.05	n. d.
11.	砷酸氫鉛 / Lead hydrogen arsenate*** (CAS No.: 7784-40-9) (※1)	-	n. d.
12.	重鉻酸鈉 / Sodium dichromate*** (CAS No.: 7789-12-0; 10588-01-9(*))	-	n. d.
13.	三乙基砷酸酯 / Triethyl arsenate*** (CAS No.: 15606-95-8)	-	n. d.
14.	鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Bis (2-ethyl(hexyl) phthalate)) (CAS No.: 117-81-7)	0.05	n. d.
15.	2,4-二硝基甲苯 / 2,4-Dinitrotoluene (CAS No.: 121-14-2)	0.05	n. d.
16.	蒽油 / Anthracene oil (CAS No.: 90640-80-5) (**)	0.05	n. d.
17.	蒽油, 蒽糊 / Anthracene oil, anthracene paste (CAS No.: 90640-81-6) (**)	0.05	n. d.
18.	蒽油, 蒽糊, 蒽餾分 / Anthracene oil, anthracene paste, anthracene fraction (CAS No.: 91995-15-2) (**)	0.05	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 3 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
19.	蔥油, 蔥糊, 輕油 / Anthracene oil, anthracene paste, distn. Lights (CAS No.: 91995-17-4) (**)	0.05	n. d.
20.	蔥油, 含蔥量少 / Anthracene oil, anthracene-low (CAS No.: 90640-82-7) (**)	0.05	n. d.
21.	鄰苯二甲酸二異丁酯 / DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)	0.05	n. d.
22.	鉻酸鉛 / Lead chromate*** (CAS No.: 7758-97-6) (*5)	-	n. d.
23.	鉬鉻紅; 顏色索引: 顏料紅104 / Lead chromate molybdate sulphate red*** (C. I. Pigment Red 104) (CAS No.: 12656-85-8) (*5)	-	n. d.
24.	鉻酸鉛; 顏色索引: 顏料黃34 / Lead sulfochromate yellow*** (C. I. Pigment Yellow 34) (CAS No.: 1344-37-2) (*5)	-	n. d.
25.	煤瀝青, 高溫 / Pitch, coal tar, high-temp. (CAS No.: 65996-93-2) (**)	0.05	n. d.
26.	磷酸三(2-氯乙基)酯 / Tris(2-chloroethyl) phosphate (TCEP) (CAS No.: 115-96-8)	0.05	n. d.
27.	丙烯醯胺 / Acrylamide (CAS No.: 79-06-1)	0.05	n. d.
28.	重鉻酸鉍 / Ammonium dichromate*** (CAS No.: 7789-09-5)	-	n. d.
29.	硼酸 / Boric acid*** (CAS No.: 10043-35-3; 11113-50-1)	-	n. d.
30.	無水四硼酸二鈉 / Disodium tetraborate, anhydrous*** (CAS No.: 1303-96-4, 1330-43-4, 12179-04-3)	-	n. d.
31.	鉻酸鉀 / Potassium chromate*** (CAS No.: 7789-00-6)	-	n. d.
32.	重鉻酸鉀 / Potassium dichromate*** (CAS No.: 7778-50-9)	-	n. d.
33.	鉻酸鈉 / Sodium chromate*** (CAS No.: 7775-11-3)	-	n. d.
34.	水合硼酸鈉 / Tetraboron disodium heptaoxide, hydrate (CAS No.: 12267-73-1) (*2)	-	n. d.
35.	三氯乙烯 / Trichloroethylene (CAS No.: 79-01-6)	0.05	n. d.
36.	乙二醇乙醚 / 2-Ethoxyethanol (CAS No.: 110-80-5)	0.05	n. d.
37.	乙二醇甲醚 / 2-Methoxyethanol (CAS No.: 109-86-4)	0.05	n. d.
38.	從三氧化鉻與其它寡聚體生成的酸類: 鉻酸 / Acids generated from chromium trioxide and their oligomers: Chromic acid*** (CAS No.: 7738-94-5)	-	n. d.
	從三氧化鉻與其它寡聚體生成的酸類: 重鉻酸 / Acids generated from chromium trioxide and their oligomers: Dichromic acid*** (CAS No.: 13530-68-2)	-	n. d.
	從三氧化鉻與其它寡聚體生成的酸類: 鉻酸與重鉻酸的寡聚體 / Acids generated from chromium trioxide and their oligomers: Oligomers of chromic acid and dichromic acid (*1)	-	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 4 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
39.	三氧化鉻 / Chromium trioxide *** (CAS No. : 1333-82-0)	-	n. d.
40.	碳酸鈷(二價) / Cobalt(II) carbonate*** (CAS No. : 513-79-1)	-	n. d.
41.	醋酸鈷(二價) / Cobalt(II) diacetate*** (CAS No. : 71-48-7)	-	n. d.
42.	硝酸鈷(二價) / Cobalt(II) dinitrate*** (CAS No. : 10141-05-6)	-	n. d.
43.	硫酸鈷(二價) / Cobalt(II) sulphate*** (CAS No. : 10124-43-3)	-	n. d.
44.	1,2,3-三氯丙烷 / 1,2,3-trichloropropane (CAS No. : 96-18-4)	0.05	n. d.
45.	鄰苯二甲酸二(C6-8支鏈)烷基酯, 富C7 / 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) (CAS No. : 71888-89-6)	0.05	n. d.
46.	鄰苯二甲酸二(C7-11支鏈與直鏈)烷基酯 / 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNU) (CAS No. : 68515-42-4)	0.05	n. d.
47.	N-甲基吡咯烷酮 / 1-methyl-2-pyrrolidone (CAS No. : 872-50-4)	0.05	n. d.
48.	乙二醇乙醚乙酸酯 / 2-ethoxyethyl acetate (CAS No. : 111-15-9)	0.05	n. d.
49.	聯氨 / Hydrazine (CAS No. : 7803-57-8; 302-01-2)	0.05	n. d.
50.	鉻酸鋇 / Strontium chromate*** (CAS No. : 7789-06-2)	-	n. d.
51.	二氯化鈷 / Cobalt dichloride (CAS No. : 7646-79-9)	0.005	n. d.
52.	1,2-二氯乙烷 / 1,2-Dichloroethane (CAS No. : 107-06-2)	0.05	n. d.
53.	4,4'-亞甲雙(2-氯苯胺) / 2,2'-dichloro-4,4'-methylenedianiline (MOCA) (CAS No. : 101-14-4)	0.05	n. d.
54.	鄰甲氧基苯胺 / 2-Methoxyaniline; o-Anisidine (CAS No. : 90-04-0)	0.05	n. d.
55.	對特辛基苯酚 / 辛基酚 / 4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol) (CAS No. : 140-66-9)	0.05	n. d.
56.	矽酸鋁, 耐火陶瓷纖維 (主要成分濃度於可變範圍內) / Aluminosilicate, Refractory Ceramic Fibres 【oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges】	0.05	n. d.
57.	砷酸 / Arsenic acid*** (CAS No. : 7778-39-4)	-	n. d.
58.	雙(2-甲氧基乙基)醚 / Bis(2-methoxyethyl) ether (CAS No. : 111-96-6)	0.05	n. d.
59.	鄰苯二甲酸二甲氧基乙酯 / Bis(2-methoxyethyl) phthalate (CAS No. : 117-82-8)	0.05	n. d.
60.	砷酸鈣 / Calcium arsenate*** (CAS No. : 7778-44-1)	-	n. d.
61.	鉻酸鉻 / Dichromium tris (chromate)*** (CAS No. : 24613-89-6)	-	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 5 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
62.	甲醛與苯胺的寡聚體 / Formaldehyde, oligomeric reaction products with aniline (technical MDA) (CAS No. : 25214-70-4)	0.05	n. d.
63.	疊氮化鉛 / Lead diazide, Lead azide*** (CAS No. : 13424-46-9)	-	n. d.
64.	苦味酸鉛 / Lead dipicrate*** (CAS No. : 6477-64-1)	-	n. d.
65.	中性斯蒂芬酸鉛 / Lead styphnate*** (CAS No. : 15245-44-0)	-	n. d.
66.	N,N-二甲基乙醯胺 / N,N-dimethylacetamide (DMAC) (CAS No. : 127-19-5)	0.05	n. d.
67.	八氫氧化五鉻酸鋅 / Pentazinc chromate octahydroxide*** (CAS No. : 49663-84-5)	-	n. d.
68.	酚酞 / Phenolphthalein (CAS No. : 77-09-8)	0.05	n. d.
69.	氫氧化鉻酸鋅鉀 / Potassium hydroxyoctaoxidizincatedi- chromate*** (CAS No. : 11103-86-9)	-	n. d.
70.	砷酸鉛 / Trilead diarsenate*** (CAS No. : 3687-31-8) (※1)	-	n. d.
71.	鋯矽酸鋁，耐火陶瓷纖維（主要成分濃度於可變範圍內） / Zirconia Aluminosilicate, Refractory Ceramic Fibres 【oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges】	0.05	n. d.
72.	鹼性藍 26 [內含≥ 0.1% 的米氏酮或米氏鹼] / [4-[[4-anilino-1-naphthyl] [4-(dimethylamino) phenyl] methylene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C. I. Basic Blue 26) (CAS No. : 2580-56-5) [with ≥ 0.1% of Michler's ketone or Michler's base]	0.05	n. d.
73.	鹼性紫 3 [內含≥ 0.1% 的米氏酮或米氏鹼] / [4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C. I. Basic Violet 3) (CAS No. : 548-62-9) [with ≥ 0.1% of Michler's ketone or Michler's base]	0.05	n. d.
74.	三甘醇二甲醚 / 1,2-bis (2-methoxyethoxy) ethane (TEGDME; triglyme) (CAS No. : 112-49-2)	0.05	n. d.
75.	乙二醇二甲醚 / 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) (CAS No. : 110-71-4)	0.05	n. d.
76.	異氰尿酸三縮水甘油酯 / TGIC (1,3,5-tris(oxiranylmethyl)- 1,3,5-triazine-2,4,6 (1H,3H,5H)-trione) (CAS No. : 2451-62-9)	0.05	n. d.
77.	異氰尿酸β-三縮水甘油酯 / β-TGIC (1,3,5-tris [(2S and 2R)-2,3-epoxypropyl]- 1,3,5-triazine-2,4,6- (1H,3H,5H)-trione) (CAS No. : 59653-74-6) (※3)	0.05	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告 Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 6 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
78.	α , α -二[(二甲氨基)苯基]-4-氨基苯甲醇 [內含 $\geq 0.1\%$ 的米氏酮或米氏鹼] / 4,4'-bis(dimethylamino)-4'-(methylamino) trityl alcohol (CAS No.: 561-41-1) [with $\geq 0.1\%$ of Michler's ketone or Michler's base]	0.05	n. d.
79.	4,4'-二(N,N-二甲氨基)二苯甲酮 (米氏酮) / 4,4'-bis(dimethylamino) benzophenone (Michler's ketone) (CAS No.: 90-94-8)	0.05	n. d.
80.	三氧化二硼 / Diboron trioxide*** (CAS No.: 1303-86-2)	-	n. d.
81.	甲醯胺 / Formamide (CAS No.: 75-12-7)	0.05	n. d.
82.	甲基磺酸鉛 / Lead(II) bis(methanesulfonate)*** (CAS No.: 17570-76-2)	-	n. d.
83.	4,4'-(對二甲氨基)二苯基甲烷 (米氏鹼) / N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) (CAS No.: 101-61-1)	0.05	n. d.
84.	溶劑藍 4 [內含 $\geq 0.1\%$ 的米氏酮或米氏鹼] / α , α -Bis[4-(dimethylamino) phenyl]-4-(phenylamino) naphthalene-1-methanol (C. I. Solvent Blue 4) (CAS No.: 6786-83-0) [with $\geq 0.1\%$ of Michler's ketone or Michler's base]	0.05	n. d.
85.	[1,2-苯二羧酸根合]二氧化三鉛 / [Phthalato(2-)] dioxotrilead*** (CAS No.: 69011-06-9)	-	n. d.
86.	支鏈和直鏈1,2-苯二羧二戊酯 / 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (CAS No.: 84777-06-0)	0.05	n. d.
87.	乙二醇二乙醚 / 1,2-Diethoxyethane (CAS No.: 629-14-1)	0.05	n. d.
88.	正丙基溴 / 1-bromopropane (CAS No.: 106-94-5)	0.05	n. d.
89.	3-乙基-2-甲基-2-(3-甲基丁基)-1,3-惡唑烷 / 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine (CAS No.: 143860-04-2)	0.05	n. d.
90.	4-(1,1,3,3-四甲基丁基)苯酚, 乙氧基 [以及所有的被定義的物質, 未知成分或可變成分的物质, 聚合物和同系物] / 4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	0.05	n. d.
91.	4,4'-二氨基-3,3'-二甲基聯苯基甲烷 / 4,4'-methylenedi-o-toluidine (CAS No.: 838-88-0)	0.05	n. d.
92.	4,4'-二氨基二苯醚 / 4,4'-oxydianiline and its salts (CAS No.: 101-80-4)	0.05	n. d.
93.	4-氨基偶氮基苯胺 / 4-Aminoazobenzene (CAS No.: 60-09-3)	0.05	n. d.
94.	2,4-二氨基甲苯 / 4-methyl-m-phenylenediamine (2,4-toluenediamine) (CAS No.: 95-80-7)	0.05	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告 Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24

頁數(Page): 7 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
95.	分支或線性的壬基酚，包括含有9個碳烷基鏈的所有獨立的同分異構體和所有含有線性或分支9個碳烷基鏈的UVCB物質 / 4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	0.05	n. d.
96.	3-甲基-6-甲氧基苯胺 / 6-methoxy-m-toluidine (p-cresidine) (CAS No.: 120-71-8)	0.05	n. d.
97.	城式醋酸鉛 / Acetic acid, lead salt, basic*** (CAS No.: 51404-69-4)	-	n. d.
98.	4-胺基聯苯 / Biphenyl-4-ylamine (CAS No.: 92-67-1)	0.05	n. d.
99.	十溴聯苯醚 / Bis(pentabromophenyl) ether (DecaBDE) (CAS No.: 1163-19-5)	0.05	n. d.
100.	六氫苯二甲酸酐 / Cyclohexane-1,2-dicarboxylic anhydride (HHPA), cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA) (CAS No.: 85-42-7, 13149-00-3, 14166-21-3)	0.05	n. d.
101.	偶氮[二]甲醯胺 / Diazene-1,2-dicarboxamide (C, C'-azodi(formamide)) (CAS No.: 123-77-3)	0.05	n. d.
102.	二氯二丁基錫 / Dibutyltin dichloride (DBTC)*** (CAS No.: 683-18-1)	-	n. d.
103.	硫酸二乙酯 / Diethyl sulphate (CAS No.: 64-67-5)	0.05	n. d.
104.	鄰苯二甲酸二異戊酯 / Diisopentylphthalate (CAS No.: 605-50-5)	0.05	n. d.
105.	硫酸二甲酯 / Dimethyl sulphate (CAS No.: 77-78-1)	0.05	n. d.
106.	2-(1-甲基丙基)-4,6-二硝基苯酚 / Dinoseb (CAS No.: 88-85-7)	0.05	n. d.
107.	雙(十八酸基)二氧代三鉛 / Dioxobis(stearato) trilead*** (CAS No.: 12578-12-0)	-	n. d.
108.	C16-18-脂肪酸鉛鹽 / Fatty acids, C16-18, lead salts*** (CAS No.: 91031-62-8)	-	n. d.
109.	呋喃 / Furan (CAS No.: 110-00-9)	0.05	n. d.
110.	全氟十一酸 / Henicosafluoroundecanoic acid (CAS No.: 2058-94-8)	0.05	n. d.
111.	全氟十四酸 / Heptacosafuorotetradecanoic acid (CAS No.: 376-06-7)	0.05	n. d.
112.	甲基六氫苯酐 / Hexahydromethylphthalic anhydride (CAS No.: 25550-51-0) 4-甲基六氫苯酐 / Hexahydro-4-methylphthalic anhydride (CAS No.: 19438-60-9) 1-甲基六氫苯酐 / Hexahydro-1-methylphthalic anhydride (CAS No.: 48122-14-1) 3-甲基六氫苯酐 / Hexahydro-3-methylphthalic anhydride (CAS No.: 57110-29-9)	0.05	n. d.
113.	四氟硼酸鉛 (II) / Lead bis(tetrafluoroborate)*** (CAS No.: 13814-96-5)	-	n. d.
114.	氨基氰鉛鹽 / Lead cyanamidate*** (CAS No.: 20837-86-9)	-	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告 Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 8 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
115.	硝酸鉛 / Lead dinitrate*** (CAS No.: 10099-74-8)	-	n. d.
116.	氧化鉛 / Lead oxide (lead monoxide)*** (CAS No.: 1317-36-8)	-	n. d.
117.	域式硫酸鉛 / Lead oxide sulfate*** (CAS No.: 12036-76-9)	-	n. d.
118.	鈦酸鉛 / Lead titanium trioxide*** (CAS No.: 12060-00-3)	-	n. d.
119.	鈦酸鉛鋅 / Lead Titanium Zirconium Oxide*** (CAS No.: 12626-81-2)	-	n. d.
120.	甲氧基乙酸 / Methoxy acetic acid (CAS No.: 625-45-6)	0.05	n. d.
121.	環氧丙烷 / Propylene oxide; 1,2-epoxypropane; methyloxirane (CAS No.: 75-56-9)	0.05	n. d.
122.	N,N-二甲基甲醯胺 / N,N-dimethylformamide; dimethyl formamide (CAS No.: 68-12-2)	0.05	n. d.
123.	N-甲基乙醯胺 / N-methylacetamide (CAS No.: 79-16-3)	0.05	n. d.
124.	鄰苯二甲酸正戊異戊酯 / N-pentyl-isopentylphthalate (CAS No.: 776297-69-9)	0.05	n. d.
125.	鄰氨基偶氮甲苯 / o-aminoazotoluene (CAS No.: 97-56-3)	0.05	n. d.
126.	四氧化鉛 / Lead tetroxide (orange lead)*** (CAS No.: 1314-41-6)	-	n. d.
127.	鄰甲苯胺 / o-Toluidine; 2-Aminotoluene (CAS No.: 95-53-4)	0.05	n. d.
128.	全氟十三酸 / Pentacosfluorotridecanoic acid (CAS No.: 72629-94-8)	0.05	n. d.
129.	氧化鉛與硫酸鉛的複合物 / Pentalead tetraoxide sulphate*** (CAS No.: 12065-90-6)	-	n. d.
130.	C. I. 顏料黃41 / Pyrochlore, antimony lead yellow*** (CAS No.: 8012-00-8)	-	n. d.
131.	含鉛的矽酸鋇 / Silicic acid, barium salt, lead-doped (※4) (CAS No.: 68784-75-8)	0.05	n. d.
132.	矽酸鉛 / Silicic acid, lead salt*** (CAS No.: 11120-22-2)	-	n. d.
133.	亞硫酸鉛(II) / Sulphurous acid, lead salt, dibasic*** (CAS No.: 62229-08-7)	-	n. d.
134.	四乙基鉛 / Tetraethyllead*** (CAS No.: 78-00-2)	-	n. d.
135.	三鹼式硫酸鉛 / C. I. 顏料白 / Tetralead trioxide sulphate*** (CAS No.: 12202-17-4)	-	n. d.
136.	全氟十二酸 / Tricosfluorododecanoic acid (CAS No.: 307-55-1)	0.05	n. d.
137.	域式碳酸鉛 / Trilead bis(carbonate) dihydroxide (basic lead carbonate)*** (CAS No.: 1319-46-6)	-	n. d.
138.	磷酸氧化鉛 / Trilead dioxide phosphonate*** (CAS No.: 12141-20-7)	-	n. d.
139.	分支或線性的乙氧基壬基酚，包括含有9個碳烷基鏈的所有獨立的同分異構體和所有含有線性或分支9個碳烷基鏈的UVCB物質 / 4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	0.05	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 9 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
140.	全氟辛酸銨 / Ammoniumpentadecafluorooctanoate (APFO)***(CAS No.: 3825-26-1)	-	n. d.
141.	鎘 / Cadmium (Cd) (CAS No.: 7440-43-9)	0.005	n. d.
142.	氧化鎘 / Cadmium oxide*** (CAS No.: 1306-19-0)	-	n. d.
143.	鄰苯二甲酸二戊酯 / Dipentyl phthalate (CAS No.: 131-18-0)	0.05	n. d.
144.	全氟辛酸 / Pentadecafluorooctanoic acid (PFOA) (CAS No.: 335-67-1)	0.05	n. d.
145.	硫化鎘 / Cadmium sulphide*** (CAS No.: 1306-23-6)	-	n. d.
146.	鄰苯二甲酸二己酯 / Dihexyl phthalate (CAS No.: 84-75-3)	0.05	n. d.
147.	直接紅28 / Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C. I. Direct Red 28) (CAS No.: 573-58-0)	0.05	n. d.
148.	直接黑38 / Disodium 4-amino-3'-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C. I. Direct Black 38) (CAS No.: 1937-37-7)	0.05	n. d.
149.	亞乙基硫脲 / Imidazolidine-2-thione; 2-imidazoline-2-thiol (CAS No.: 96-45-7)	0.05	n. d.
150.	醋酸鉛 / Lead di(acetate)***(CAS No.: 301-04-2)	-	n. d.
151.	磷酸三(二甲苯)酯 / Trixylyl phosphate (CAS No.: 25155-23-1)	0.05	n. d.
152.	鄰苯二甲酸二己酯(支鏈和直鏈) / 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (CAS No.: 68515-50-4)	0.05	n. d.
153.	氯化鎘 / Cadmium chloride*** (CAS No.: 10108-64-2)	-	n. d.
154.	過硼酸鈉 / Sodium perborate; perboric acid, sodium salt***	-	n. d.
155.	過氧偏硼酸鈉 / Sodium peroxometaborate*** (CAS No.: 7632-04-4)	-	n. d.
156.	2-(2'-羥基-3',5'-二-叔-戊基苯基)苯並三唑(紫外線吸收劑328) / 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) (CAS No.: 25973-55-1)	0.05	n. d.
157.	2-[2'-羥基-3',5'-二-叔-丁基苯基]-苯並三唑(紫外線吸收劑320) / 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) (CAS No.: 3846-71-7)	0.05	n. d.
158.	二正辛基-雙(2-乙基己基巰基乙酸酯)錫 / 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)***(CAS No.: 15571-58-1)	-	n. d.
159.	氟化鎘 / Cadmium fluoride*** (CAS No.: 7790-79-6)	-	n. d.
160.	硫酸鎘 / Cadmium sulphate*** (CAS No.: 10124-36-4; 31119-53-6)	-	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 10 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
161.	二正辛基-雙(2-乙基己基巰基乙酸酯)錫和單辛基-三(2-乙基己基巰基乙酸酯)錫的反應物 / Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)***	-	n. d.
162.	鄰苯二甲酸二(C6-10)烷基酯; 鄰苯二甲酸二己、二辛、二癸酯混合物; 鄰苯二甲酸二己酯 ≥ 0.3% / 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (CAS No.: 68515-51-5; 68648-93-1)	0.05	n. d.
163.	5-二級丁基-2-(2,4-二甲基環己-3-烯-1-基)-5-甲基-1,3-二氧環己烷[1], 5-二級丁基-2-(4,6-二甲基環己-3-烯-1-基)-5-甲基-1,3-二氧環己烷[2], [任何[1]和[2]或者其任意組合的單獨異構物或其任何組合] / 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual isomers of [1] and [2] or any combination thereof]	0.05	n. d.
164.	1,3-丙烷磺內酯 / 1,3-propanesultone (CAS No.: 1120-71-4)	0.05	n. d.
165.	2,4-二-叔丁基-6-(5-氯-2H-苯并三唑-2-基)苯酚(紫外線吸收劑327) / 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) (CAS No.: 3864-99-1)	0.05	n. d.
166.	2-(3-仲-丁基-5-叔丁基-2-羥苯基)苯并三唑(紫外線吸收劑 UV-350) / 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350) (CAS No.: 36437-37-3)	0.05	n. d.
167.	硝基苯 / Nitrobenzene (CAS No.: 98-95-3)	0.05	n. d.
168.	全氟壬酸 / Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptafluorononanoic acid and its sodium and ammonium salts (CAS No.: 375-95-1; 21049-39-8; 4149-60-4)	0.05	n. d.
169.	苯并(a)芘 / Benzo[def]chrysene (Benzo[a]pyrene) (CAS No.: 50-32-8)	0.05	n. d.
170.	雙酚A / 4,4'-isopropylidenediphenol (Bisphenol A) (CAS No.: 80-05-7)	0.05	n. d.
171.	4-庚基苯酚, 支鍊及直鍊 (4-HPbl), 包括含有7個碳烷基鏈的所有獨立的同分異構體和所有含有線性或分支7個碳烷基鏈的UVCB物質 / 4-Heptylphenol, branched and linear (4-HPbl) [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	0.05	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 11 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
172.	十九氟癸酸及其鈉和銨鹽 / Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts (CAS No. : 3108-42-7, 335-76-2, 3830-45-3)	0.05	n. d.
173.	對(1,1-二甲基丙基)苯酚 / p-(1,1- dimethylpropyl) phenol (PTAP) (CAS No. : 80-46-6)	0.05	n. d.
174.	全氟己基磺酸及其鹽類 / Perfluorohexane-1-sulphonic acid and its salts (PFHxS) (CAS No. : 355-46-4)	0.05	n. d.
175.	德克隆(涵蓋各個反式及順式同分易構物或者相關組合) / 1, 6, 7, 8, 9, 14, 15, 16, 17, 17, 18, 18-Dodecachloropentacyclo [12. 2. 1. 16, 9. 02, 13. 05, 10]octadeca-7, 15-diene ("Dechlorane Plus" TM) [covering any of its individual anti- and syn-isomers or any combination thereof]	0.05	n. d.
176.	苯並[a]蔥 / Benz[a]anthracene (CAS No. : 56-55-3)	0.05	n. d.
177.	硝酸鎘 / Cadmium nitrate*** (CAS No. : 10325-94-7)	-	n. d.
178.	碳酸鎘 / Cadmium carbonate*** (CAS No. : 513-78-0)	-	n. d.
179.	氫氧化鎘 / Cadmium hydroxide*** (CAS No. : 21041-95-2)	-	n. d.
180.	苯並[a]菲 / Chrysene (CAS No. : 218-01-9)	0.05	n. d.
181.	1, 3, 4-噻唑烷-2, 5-二硫酮, 甲醛及4-庚基苯酚支鏈及直鏈反應物, (RP-HP) [含≥0.1% w/w 支鏈及直鏈4-庚基苯酚] / Reaction products of 1, 3, 4-thiadiazolidine-2, 5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear] (※7)	-	n. d.
182.	鄰苯二甲酸二環己酯 / Dicyclohexyl phthalate (DCHP) (CAS No. : 84-61-7)	0.05	n. d.
183.	1, 2, 4-苯三甲酸酐 / Benzene-1, 2, 4- tricarboxylic acid 1, 2- anhydride (trimellitic anhydride) (CAS No. : 552-30-7)	0.05	n. d.
184.	苯並(G, H, I)芘 / Benzo[ghi]perylene (CAS No. : 191-24-2)	0.05	n. d.
185.	八甲基環四矽氧烷 / Octamethylcyclotetrasiloxane (D4) (CAS No. : 556-67-2)	0.05	n. d.
186.	十甲基環五矽氧烷 / Decamethylcyclopentasiloxane (D5) (CAS No. : 541-02-6)	0.05	n. d.
187.	十二甲基環六矽氧烷 / Dodecamethylcyclohexasiloxane (D6) (CAS No. : 540-97-6)	0.05	n. d.
188.	氧化硼鈉 / Disodium octaborate*** (CAS No. : 12008-41-2)	-	n. d.
189.	乙二胺 / Ethylenediamine (CAS No. : 107-15-3)	0.05	n. d.
190.	鉛 / Lead (Pb) (CAS No. : 7439-92-1) (●)	0.005	n. d.
191.	氫化三聯苯 / Terphenyl hydrogenated (CAS No. : 61788-32-7)	0.05	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 12 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



(2) 高關注物質(SVHC)建議清單 / SVHC proposed list (2018/09/04)

No.	物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
1.	2,2-雙(4-羥基苯基)-4-甲基戊烷 / 2,2-bis(4'-hydroxyphenyl)-4-methylpentane (CAS No. : 6807-17-6)	0.05	n. d.
2.	苯駢(k)螢蔥 / Benzo[k]fluoranthene (CAS No. : 207-08-9)	0.05	n. d.
3.	苯駢芘 / Fluoranthene (CAS No. : 206-44-0)	0.05	n. d.
4.	菲 / Phenanthrene (CAS No. : 85-01-8)	0.05	n. d.
5.	芘 / Pyrene (CAS No. : 129-00-0)	0.05	n. d.
6.	十一氟己酸及其銨鹽 / Undecafluorohexanoic acid and its ammonium salt (CAS No. : 307-24-4; 21615-47-4)	0.05	n. d.

Remark :

- (1) 高關注物質(SVHC)候選清單 / Candidate List of SVHC (2018/06/27)
<http://echa.europa.eu/web/guest/candidate-list-table>

(2) 高關注物質(SVHC)建議清單 / Proposed list of SVHC (2018/09/04)
<http://echa.europa.eu/addressing-chemicals-of-concern/authorisation/substances-of-very-high-concern-identification>
- 根據Regulation (EC) No 1907/2006 中第7條款第2項之規定, 如果物質合乎第57條款之標準以及可依據第59(1)條之規定鑑別, 且同時符合下列兩項狀況, 任何成品之製造人和進口人應向歐洲化學總署(ECHA)通報:

 - 成品中所含物質每年超過1公噸。
 - 依重量百分比計算, 物質濃度超過0.1%。

In accordance with Regulation (EC) No 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 2 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance is present in those articles above a concentration of 0.1% weight by weight (w/w).
- Regulation (EC) No 1907/2006 中第 33 條要求成品供應商, 其成品所含物質符合第57條款的標準並依照第59(1)條款確定其濃度大於 0.1wt%, 應提供成品接受者充份可取得資訊, 以確保成品的安全使用(至少包括物質的名稱)。

Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 13 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



4. 如果樣品中高關注物質的濃度超過0.1% (w/w)和/或歐盟(EC)No. 1272/2008 CLP法規及其修訂中設定的特殊濃度限值，建議客戶根據歐盟REACH法規No. 1907/2006對有關高關注物質準備安全資料表(SDS)以符合供應鏈通信的義務，如：
- (I) 根據(EC)No. 1272/2008 CLP法規被列為有害物質。
 - (II) 根據(EC)No. 1272/2008 CLP法規被列為有害混合物，而當中物質的濃度大於或等於(EC)No. 1272/2008 CLP法規列出的濃度限值；或
 - (III) 根據(EC)No. 1272/2008 CLP法規並未列為有害混合物，但包含：
 - (a) 對人類健康或環境有害的物質，而在固體或液體混合物(即非氣體混合物)中其濃度 $\geq 1\%$ (w/w)或在氣體混合物中占體積 $\geq 0.2\%$ ，或
 - (b) PBT或vPvB物質，在固體或液體混合物(即非氣體混合物)中個別濃度 $\geq 0.1\%$ (w/w)，或
 - (c) 授權審議的高關注物質候選清單上的物質(除上述以外的原因)在個別非氣體混合物中的濃度 $\geq 0.1\%$ (w/w)，或
 - (d) 設有歐洲範圍內工作場所接觸限值的物質。

If a SVHC is found over 0.1% (w/w) and/or the specific concentration limit which is set in Regulation (EC) No 1272/2008 and its amendments, client is suggested to prepare a Safety Data Sheet (SDS) against the SVHC to comply with the supply chain communication obligation under Regulation (EC) No 1907/2006, in which:

- (I) a substance that is classified as hazardous under the CLP Regulation (EC) No 1272/2008.
 - (II) mixture that is classified as hazardous under the CLP Regulation (EC) No 1272/2008, when it contains a substance with concentration equal to, or greater than the classification limit as set in Regulation (EC) No. 1272/2008; or
 - (III) a mixture is not classified as hazardous under the CLP Regulation (EC) No 1272/2008, but contains either:
 - (a) a substance posing human health or environmental hazards in an individual concentration of $\geq 1\%$ by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures) or $\geq 0.2\%$ by volume for gaseous mixtures; or
 - (b) a substance that is PBT, or vPvB in an individual concentration of $\geq 0.1\%$ by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures); or
 - (c) a substance on the SVHC candidate list (for reasons other than those listed above), in an individual concentration of $\geq 0.1\%$ by weight for non-gaseous mixtures; or
 - (d) a substance for which there are Europe-wide workplace exposure limits
5. 倘若SVHC超出報告極限值，建議客戶確認含有該SVHC的零件，並要求實驗室進一步的定量分析而取得SVHC的確切濃度。
- If a SVHC is found over the reporting limit, client is suggested to identify the component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.

備註(Note)：

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. RL = Reporting Limit / 報告極限值
3. n.d. = not detected = below Reporting Limit / 未檢出
4. "-" = Not Regulated / 無規格值
5. (*): 重鉻酸鈉二水合物(CAS No. : 7789-12-0)含量 = 重鉻酸鈉含量 \times 1.1375
(conc. of Sodium dichromate dihydrate = conc. of sodium dichromate \times 1.1375)
6. (**): 上述混合物的濃度是經由所獲得的成分比例介於被選擇標靶物及混合物所推估出來。 / The concentrations of above-mentioned mixtures are evaluated per the gained composition rate between the selected marks and the mixtures.

測試報告

Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 14 of 17

CHANG CHUN PLASTICS CO., LTD.
 (CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
 (CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
 7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



7. **: 該物質是由單辛基錫、二辛基錫、三丁基錫、二丁基錫、全氟辛酸或各別元素 (例如: 砷、鉛、六價鉻、硼、鈷、鋇、鎘)之測試結果計算得知。 / The substance was calculated by the test results of MonoctylTin, Dioctyl Tin, Tributyl Tin, Dibutyl Tin, PFOA or element (Ex. Arsenic, Lead, Cr(VI), Boron, Cobalt, Barium, Cadmium respectively).

測試結果如下(The test result is given as):

物質名稱 (Substance Name)	RL (%)	濃度 (Concentration) (%)
三丁基錫 / Tributyl Tin (TBT)	0.05	n. d.
砷 / Arsenic (As) (※2)	0.005	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)	0.005	n. d.
硼 / Boron (B) (※2)	0.005	n. d.
鈷 / Cobalt (Co)	0.005	n. d.
二丁基錫 / Dibutyl Tin (DBT)	0.05	n. d.
鋇 / Barium (Ba)	0.005	n. d.
二辛基錫 / Dioctyl Tin (DOT)	0.0231	n. d.
單辛基錫 / MonoctylTin (MOT)	0.0140	n. d.

8. F 參數換算表/F Parameter Conversion Table : http://twap.sgs.com/sgsrsts/chn/download-REACH_tw.asp
9. 分類/Classification : Please refer to http://twap.sgs.com/sgsrsts/chn/download-REACH_tw.asp
10. (*1): 鉻酸與重鉻酸的寡聚體: 因為其寡聚體是由未知數的鉻酸或與重鉻酸所組成, 而導致沒有固定分子量, 因此以單體鉻酸或重鉻酸較為重要並應被考慮。 / Oligomers of chromic acid and dichromic acid : since the oligomers are made of the unknown amount of chromic acid or dichromic acid that results in no fixed molecular weight, therefore the monomer of chromic acid or dichromic acid is relevant and considered.
11. (*2): 水合硼酸鈉: 依照歐洲化學總署解釋以無水四硼酸二鈉數據作為代表(歐洲化學總署回信編號 Ref no.: INC 000000032519) / Tetraboron disodium heptaoxide, hydrate: Only anhydrous form of disodium tetraborate is relevant and considered according to ECHA explanation (Ref no.: INC 000000032519).
12. (*1): 此砷鉛化合物之濃度是取砷及鉛兩者各別換算出砷鉛化合物濃度, 並取其最小值做為最後出報告之依據。(Regarding the compound containing arsenic and lead, lead and arsenic are tested and respectively used for the calculation of the independent concentration of the compound containing arsenic and lead. The minimum value of the two independently calculated concentrations is used as the final concentration for the report.)
13. (*2): 被萃取出之溶出硼/砷是以感應耦合電漿原子發射光譜儀檢測得之。 / The extracted soluble Boron / Arsenic are detected by ICP-AES.
14. (*3): 由於TGIC本身含有β-TGIC, 依照ECHA 技術文件 β-TGIC與 TGIC 約為 1:10 比例, 因此β-TGIC將以1/10 的TGIC計算濃度。 / TGIC is a mixture and also contains β-TGIC. According to the ECHA's technical dossier the ratio of β-TGIC to TGIC is around 1 to 10. Therefore β-TGIC is issued based on the above-mentioned ratio.

測試報告 Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 15 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



15. (※4): 只有在矽與鉛定性結果為陽性時，再以鋇之濃度換算之。/ Only if both qualitative results of lead and silicon are positive, the test result of the compound will be calculated based on the concentration of barium.
16. (※5): 此化合物之濃度是取六價鉻及鉛兩者各別換算出化合物濃度，並取其最小值做為最後出報告之依據。
(Regarding the compound containing Cr(VI) and lead, lead and Cr(VI) are tested and respectively used for the calculation of the independent concentration of the compound containing Cr(VI) and lead. The minimum value of the two independently calculated concentrations is used as the final concentration for the report.)
17. (※7): RP-HP無法直接測得且無法自特定元素計算含量，RP-HP之所以被定義於SVHC是因為4-HPb1，因此分析4-HPb1取代RP-HP。
/ RP-HP can't be identified directly and test result can't be calculated based on specific element(s) or compound. RP-HP is identified as SVHC because of 4-HPb1, therefore 4-HPb1 is analysed instead of RP-HP.
18. (●): 因為鉛有一很廣泛應用，不太可能判定是否檢驗出的鉛是來自鉛離子，鉛元素或鉛化合物，因此用檢驗出的總鉛來代表鉛。/ Since lead has a wide application, it is unlikely to determine if the detected lead comes from the lead ion, lead element or/ and lead compounds. Therefore the detected total lead is used on behalf of lead.

測試報告 Test Report

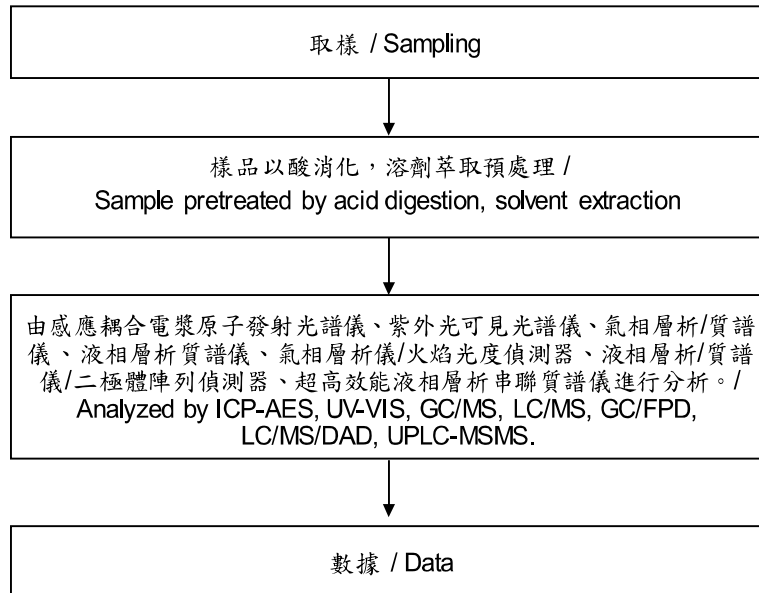
號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 16 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



SVHC 分析流程圖 / Analytical flow chart of SVHC

- 測試人員：涂雅苓, 陳恩臻 / Technician: Yaling Tu, Rita Chen
- 測試負責人：張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告 Test Report

號碼(No.): CC/2018/C0204 日期(Date): 2018/12/24 頁數(Page): 17 of 17

CHANG CHUN PLASTICS CO., LTD.
(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。 *
(The tested sample / part is marked by an arrow if it's shown on the photo.)

CC/2018/C0204



** 報告結尾(End of Report) **

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 1 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as) :


送樣廠商(Sample Submitted By) : 長春人造樹脂廠股份有限公司 (CHANG CHUN PLASTICS CO., LTD.)
樣品名稱(Sample Description) : POLYBUTYLENE TEREPHTHALATE (PBT)
樣品型號(Style/Item No.) : PBT (4108, 4115, 4115F, 4120, 4130, 4130F, 4140, 4620, 4630, 4730, 4815, 4820, 4830, 4840, 4815G, 4830G)
收件日期(Sample Receiving Date) : 2018/12/18
測試期間(Testing Period) : 2018/12/18 to 2018/12/24

測試需求(Test Requested) :

- (1) 依據客戶指定, 參考RoHS 2011/65/EU Annex II及其修訂指令(EU) 2015/863測試鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP. (As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample(s).)
- (2) 依據客戶指定, 檢測 PAHs 及其他測項. (As specified by client, to test PAHs and other item(s).)

測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages).

結論(Conclusion) : (2) 根據客戶所提供的樣品, 18項多環芳香烴測試結果符合德國產品安全委員會(AfPS) GS PAHs第 2 類「列於2009/48/EC之玩具」之限值要求. (Based upon the performed tests on the submitted sample(s), the test results of PAHs (18 items) comply with the limits of PAHs requirement (Category 2) 「Toy under 2009/48/EC」 as set by German Committee on Product Safety (AfPS) GS PAHs.)


Troy Chang / Manager - Tech
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei



測試報告

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 2 of 16

Test Report

CHANG CHUN PLASTICS CO., LTD.



(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN

測試結果(Test Results)

測試部位(PART NAME)No. 1 : 黑色塑膠粒 (BLACK PLASTIC PELLETS)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	n. d.
鉛 / Lead (Pb)	mg/kg		2	7.14
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-4 (2013) and performed by ICP-AES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考IEC 62321-7-2 (2017), 以UV-VIS 檢測. / With reference to IEC 62321-7-2 (2017) and performed by UV-VIS.	8	n. d.
六溴環十二烷及所有主要被辨別出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	mg/kg	參考IEC 62321 (2008), 以氣相層析儀/質譜儀檢測. / With reference to IEC 62321 (2008). Analysis was performed by GC/MS.	5	n. d.
全氟辛烷磺酸 / Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide)	mg/kg	參考US EPA 3550C (2007), 以液相層析儀/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.
全氟辛酸 / PFOA (CAS No.: 335-67-1)	mg/kg		10	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 3 of 16

Test Report

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析儀/質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS.	-	n. d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n. d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n. d.
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n. d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d.
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n. d.
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n. d.
十溴聯苯 / Decabromobiphenyl	mg/kg		5	n. d.
多溴聯苯醚總和 / Sum of PBDEs	mg/kg		-	n. d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n. d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n. d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n. d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n. d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n. d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n. d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n. d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n. d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg	5	n. d.	
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg	5	n. d.	
四溴雙酚-A / Tetrabromobisphenol A (TBBP-A) (CAS No. : 79-94-7)	mg/kg	參考Global SOP RSTS-E&E-121 (2012), 以液相層析儀/質譜儀分析. / With reference to Global SOP RSTS-E&E-121 (2012). Analysis was performed by LC/MS.	10	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 4 of 16

Test Report

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
多環芳香烴 / Polycyclic Aromatic Hydrocarbons (PAHs)				
芘 / Acenaphthene (CAS No. : 83-32-9)	mg/kg	參考AfPS GS 2014:01 PAK, 以氣相層析儀/質譜儀檢測. / With reference to AfPS GS 2014:01 PAK. Analysis was performed by GC/MS.	0.2	n. d.
芴 / Acenaphthylene (CAS No. : 208-96-8)	mg/kg		0.2	n. d.
蔥 / Anthracene (CAS No. : 120-12-7)	mg/kg		0.2	n. d.
苯駢蔥 / Benzo[a]anthracene (CAS No. : 56-55-3)	mg/kg		0.2	n. d.
苯駢(a)芘 / Benzo[a]pyrene (CAS No. : 50-32-8)	mg/kg		0.2	n. d.
苯(b)苯駢芴 / Benzo[b]fluoranthene (CAS No. : 205-99-2)	mg/kg		0.2	n. d.
苯駢芘 / Benzo[g, h, i]perylene (CAS No. : 191-24-2)	mg/kg		0.2	n. d.
苯駢(k)螢蔥 / Benzo[k]fluoranthene (CAS No. : 207-08-9)	mg/kg		0.2	n. d.
Chrysene (CAS No. : 218-01-9)	mg/kg		0.2	n. d.
二苯駢蔥 / Dibenzo[a, h]anthracene (CAS No. : 53-70-3)	mg/kg		0.2	n. d.
苯駢芴 / Fluoranthene (CAS No. : 206-44-0)	mg/kg		0.2	n. d.
芴 / Fluorene (CAS No. : 86-73-7)	mg/kg		0.2	n. d.
節酮芘 / Indeno[1, 2, 3-c, d] pyrene (CAS No. : 193-39-5)	mg/kg		0.2	n. d.
萘 / Naphthalene (CAS No. : 91-20-3)	mg/kg		0.2	n. d.
菲 / Phenanthrene (CAS No. : 85-01-8)	mg/kg		0.2	n. d.
芘 / Pyrene (CAS No. : 129-00-0)	mg/kg		0.2	n. d.
苯(j)苯駢芴 / Benzo[j]fluoranthene (CAS No. : 205-82-3)	mg/kg		0.2	n. d.
苯駢(e)芘 / Benzo[e]pyrene (CAS No. : 192-97-2)	mg/kg		0.2	n. d.
多環芳香烴18項總和 / Sum of 18 PAHs	mg/kg	-	n. d.	

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 5 of 16

Test Report

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
紅磷 / Red phosphorus	**	以熱裂解-氣相層析儀/質譜儀分析。 / Analysis was performed by Pyrolyzer-GC/MS.	-	Negative
鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7)	mg/kg	參考IEC 62321-8 (2017), 以氣相層析 儀/質譜儀檢測。 / With reference to IEC 62321-8 (2017). Analysis was performed by GC/MS.	50	n. d.
鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)	mg/kg		50	n. d.
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	mg/kg		50	n. d.
鄰苯二甲酸二異丁酯 / DIBP (Di- isobutyl phthalate) (CAS No.: 84-69- 5)	mg/kg		50	n. d.
鄰苯二甲酸二異癸酯 / DIDP (Di- isodecyl phthalate) (CAS No.: 26761- 40-0; 68515-49-1)	mg/kg		50	n. d.
鄰苯二甲酸二異壬酯 / DINP (Di- isononyl phthalate) (CAS No.: 28553- 12-0; 68515-48-0)	mg/kg		50	n. d.
鄰苯二甲酸二正辛酯 / DNOP (Di-n- octyl phthalate) (CAS No.: 117-84-0)	mg/kg		50	n. d.

備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n. d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. "-" = Not Regulated (無規格值)
5. **= Qualitative analysis (No Unit) 定性分析(無單位)
6. Negative = Undetectable 陰性(未偵測到); Positive = Detectable 陽性(已偵測到)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 6 of 16

Test Report

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



△ 德國產品安全委員會(AfPS) GS PAHs 要求 /

AfPS (German commission for Product Safety): GS PAHs requirements

項目 (Parameter)	第1類(Category 1)	第2類(Category 2)		第3類(Category 3)	
	意圖放入嘴內的材料或玩具會與皮膚有所接觸(超過30秒). (Material indented to be put in the mouth or toys with intended skin contact (longer than 30 s).)	不屬於第1類的材料並可預見與皮膚接觸逾30秒(長期或經常與皮膚接觸). (Materials not falling under category 1 with foreseeable contact to skin for longer than 30 seconds (long-term skin or frequent contact).)	列於2009/48/EC之玩具 (Toy under 2009/48/EC)	列於德國產品安全法之其他產品 (Other products under ProdSG)	列於2009/48/EC之玩具 (Toy under 2009/48/EC)
Naphthalene	< 1	< 2		< 10	
Acenaphthylene	< 1 Sum	< 5 Sum	< 10 Sum	< 20 Sum	< 50 Sum
Acenaphthene					
Fluorene					
Phenanthrene					
Anthracene					
Fluoranthene					
Pyrene					
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Chrysene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[b]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[j]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[k]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[a]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[e]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Indeno[1,2,3-c,d] pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Dibenzo[a,h]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[g,h,i]perylene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
18項PAH總濃度 (Sum of 18 PAH)	< 1	< 5	< 10	< 20	< 50

單位(Unit) : mg/kg

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 7 of 16

CHANG CHUN PLASTICS CO., LTD.



(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN

PFOS參考資訊(Reference Information) : 持久性有機污染物 POPs - (EU) 757/2010

PFOS濃度在物質或製備中不得超過0.001%(10ppm)，在半成品、成品或零部件中不得超過0.1%(1000ppm)，在紡織品或塗層材料中不得超過 $1\mu\text{g}/\text{m}^2$ 。

(Outlawing PFOS as substances or preparations in concentrations above 0.001% (10ppm), in semi-finished products or articles or parts at a level above 0.1%(1000ppm), in textiles or other coated materials above $1\mu\text{g}/\text{m}^2$.)

測試報告

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 8 of 16

Test Report

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN

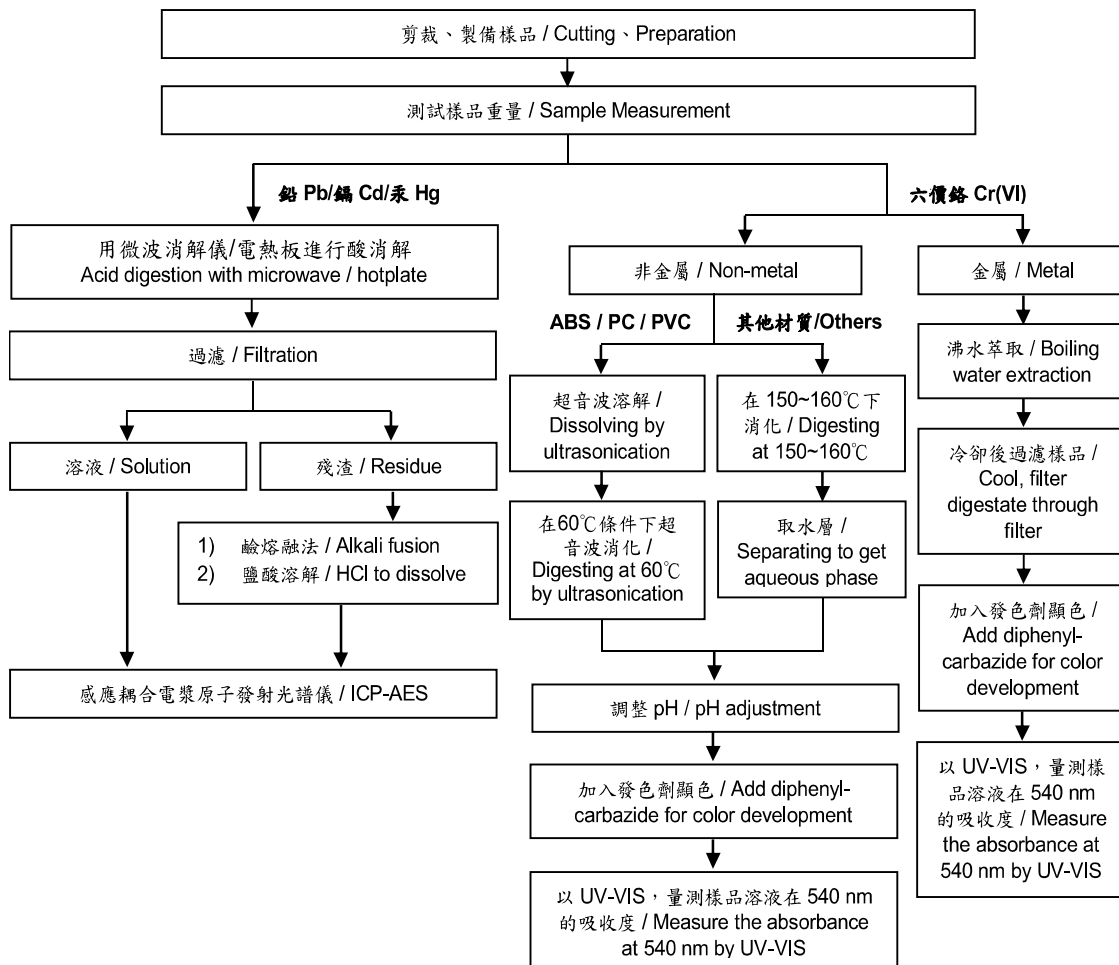


重金屬流程圖 / Analytical flow chart of Heavy Metal

根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)

- 測試人員：陳恩臻 / Technician : Rita Chen
- 測試負責人：張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 9 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

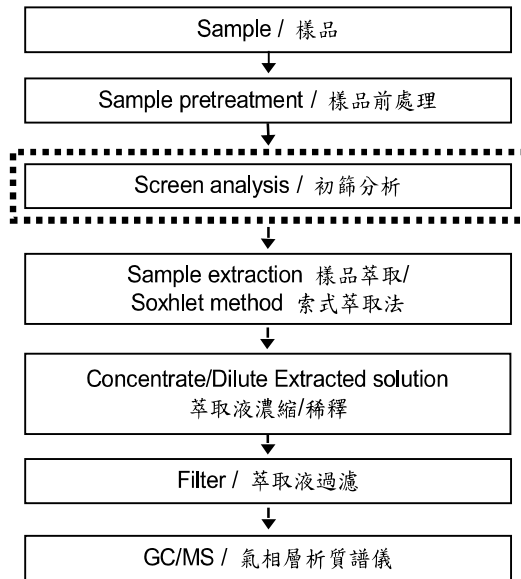
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang

初次測試程序 / First testing process —————>
 選擇性篩檢程序 / Optional screen process>
 確認程序 / Confirmation process - - - >



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 10 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

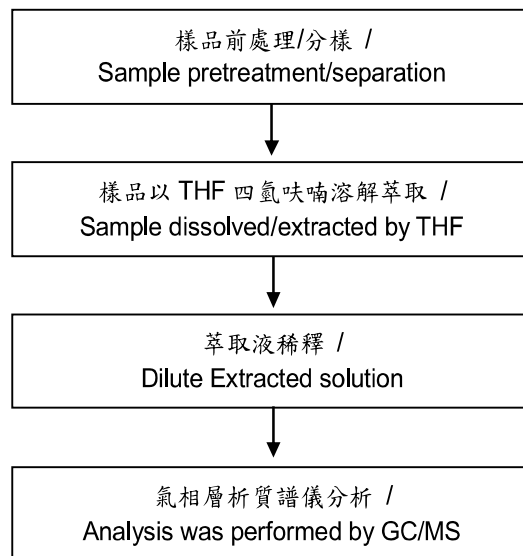
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



可塑劑分析流程圖 / Analytical flow chart - Phthalate

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor : Troy Chang

【測試方法/Test method: IEC 62321-8】



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 11 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

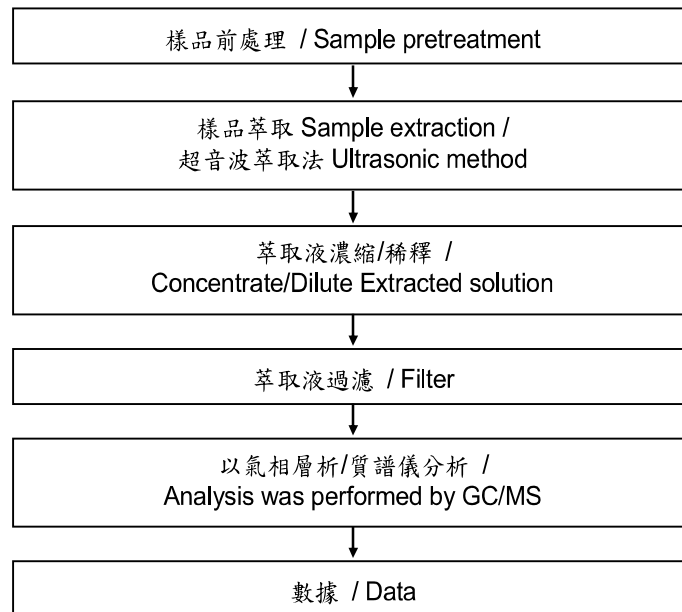
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



六溴環十二烷分析流程圖 / Analytical flow chart - HBCDD

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 12 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

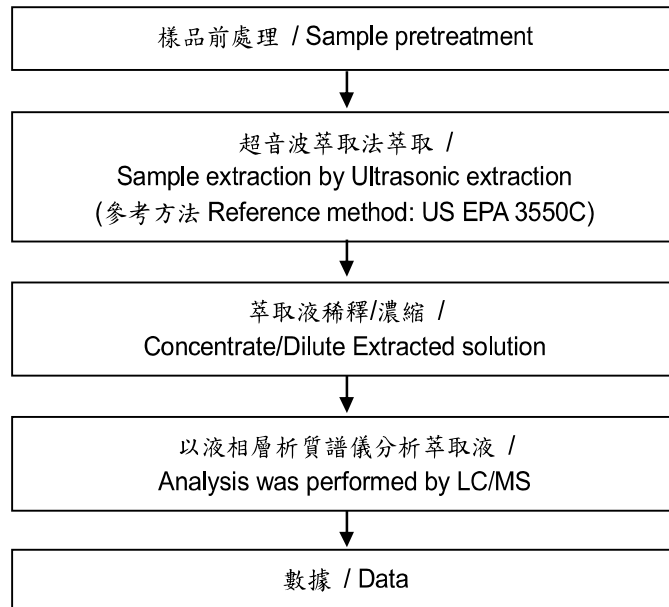
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



全氟辛酸/全氟辛烷磺酸分析流程圖 / Analytical flow chart - PFOA/PFOS

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 13 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

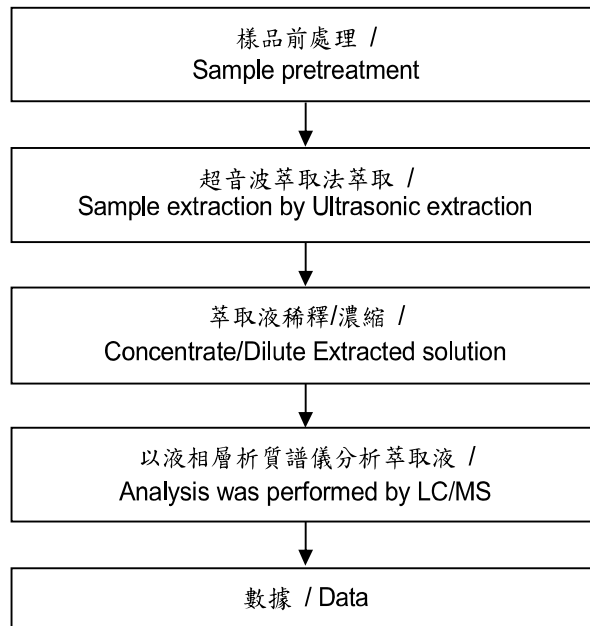
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



四溴雙酚-A 分析流程圖 / Analytical flow chart - TBBP-A

- 測試人員：涂雅琴 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 14 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

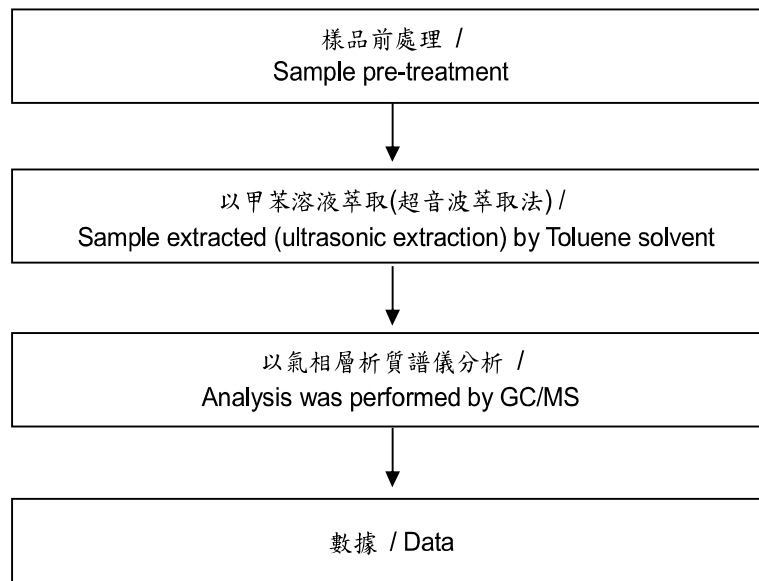
7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



多環芳香烴分析流程圖 /

Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)

- 測試人員：涂雅琴 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 15 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

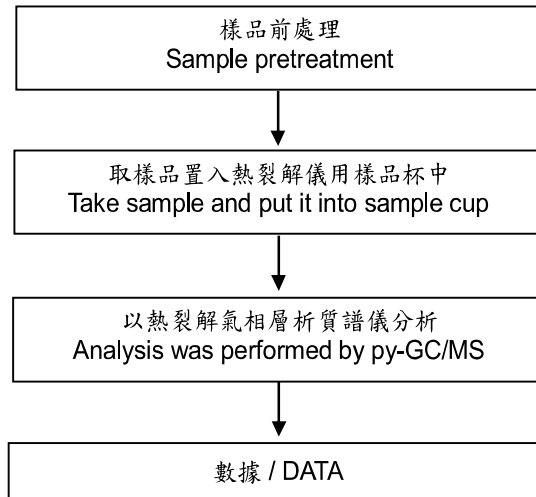
(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



紅磷分析流程 / Analytical flow chart - Red phosphorus

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



測試報告

Test Report

號碼(No.) : CE/2018/C3381

日期(Date) : 2018/12/24

頁數(Page): 16 of 16

CHANG CHUN PLASTICS CO., LTD.

(CHANG CHUN CHEMICAL (ZHANGZHOU) CO., LTD.)

(CHANG CHUN CHEMICAL (JIANGSU) CO., LTD.)

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。*
(The tested sample / part is marked by an arrow if it's shown on the photo.)

CE/2018/C3381



** 報告結尾 (End of Report) **

DONGGUAN HUARONG MATERIAL CO., LTD

DONGGUAN CITY CHANGAN TOWN OF SHATOU VILLAGE EAST TWO STREETN NO.18

The following sample(s) was/were submitted and identified on behalf of the clients as : C5191

SGS Job No. : GZIN1908043524PC - GZ

Date of Sample Received : 15 Aug 2019

Testing Period : 15 Aug 2019 - 20 Aug 2019

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

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

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

Conclusion : Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Dongyu Xie
Approved Signatory



CANML1916212201



Test Report

No. CANML1916212201

Date: 20 Aug 2019

Page 2 of 4

Test Results :

Test Part Description :

Quantity

SN1

Reference

CAN19-162122.001

Description

Copper-colored metal

Remarks :

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

Test Method : With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015, analyzed by ICP-OES and UV-Vis .

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	19
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND

Notes :

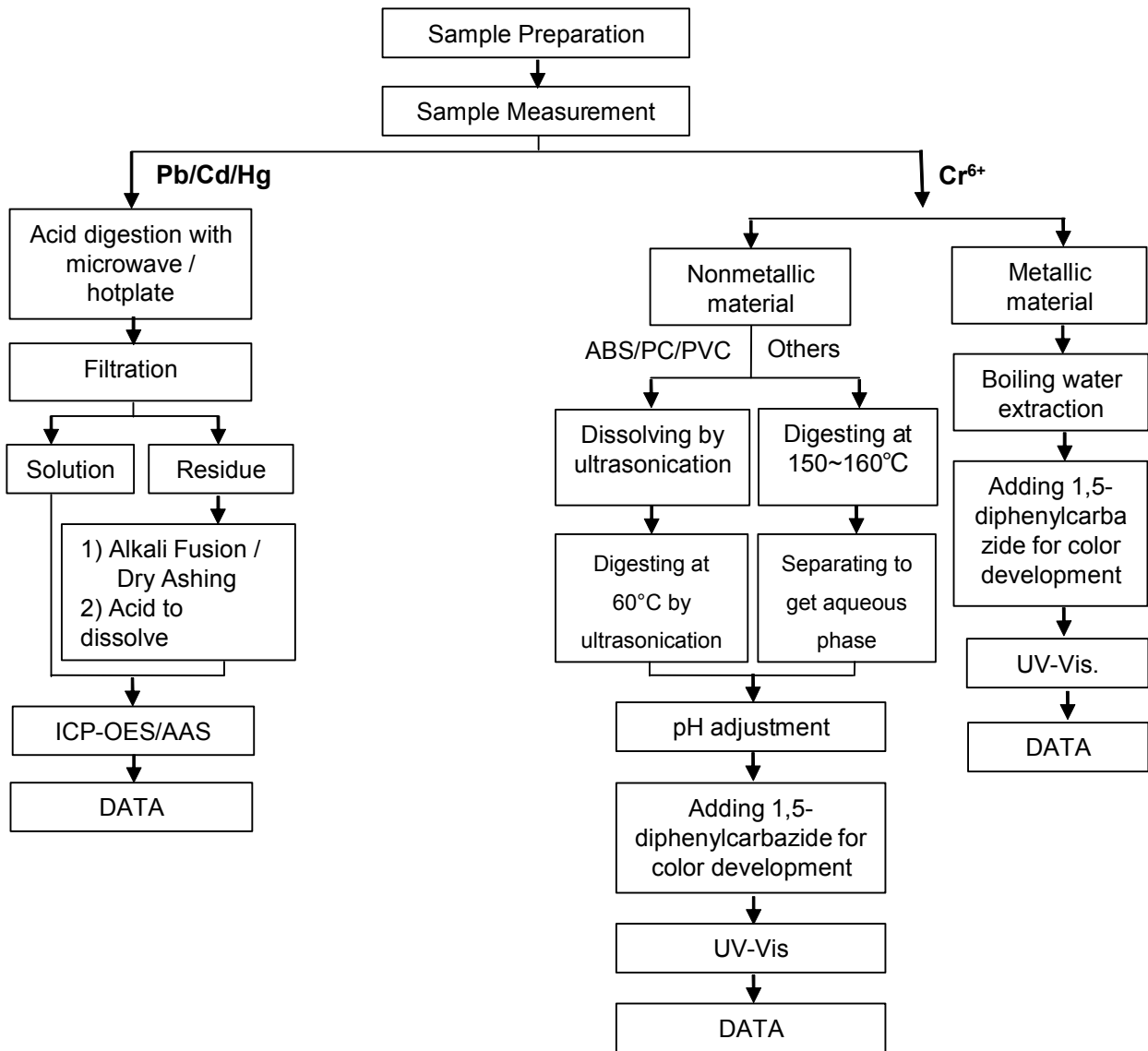
- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series
https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25
- (2) ▼= a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI
 b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating
 c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination
 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.



ATTACHMENTS

Pb/Cd/Hg/Cr⁶⁺ Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr⁶⁺ test method excluded).



Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***

DONGGUAN HUARONG MATERIAL CO., LTD

DONGGUAN CITY CHANGAN TOWN OF SHATOU VILLAGE EAST TWO STREETN NO.18

The following sample(s) was/were submitted and identified on behalf of the clients as : C2680(H65)

SGS Job No. : GZIN1908043524PC - GZ

Date of Sample Received : 15 Aug 2019

Testing Period : 15 Aug 2019 - 20 Aug 2019

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

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

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

Conclusion : Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Dongyu Xie
Approved Signatory



CANML1916212205



Test Report

No. CANML1916212205

Date: 20 Aug 2019

Page 2 of 4

Test Results :

Test Part Description :

Quantity: SN1 **Accession No.:** CAN19-162122.003 **Description:** Brassy metal

Remarks :

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

Test Method : With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015, analyzed by ICP-OES and UV-Vis .

Test Item(s)	Limit	Unit	MDL	003
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	80
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND

Notes :

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series
https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25
- (2) ▼= a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI
 b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating
 c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination
 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.



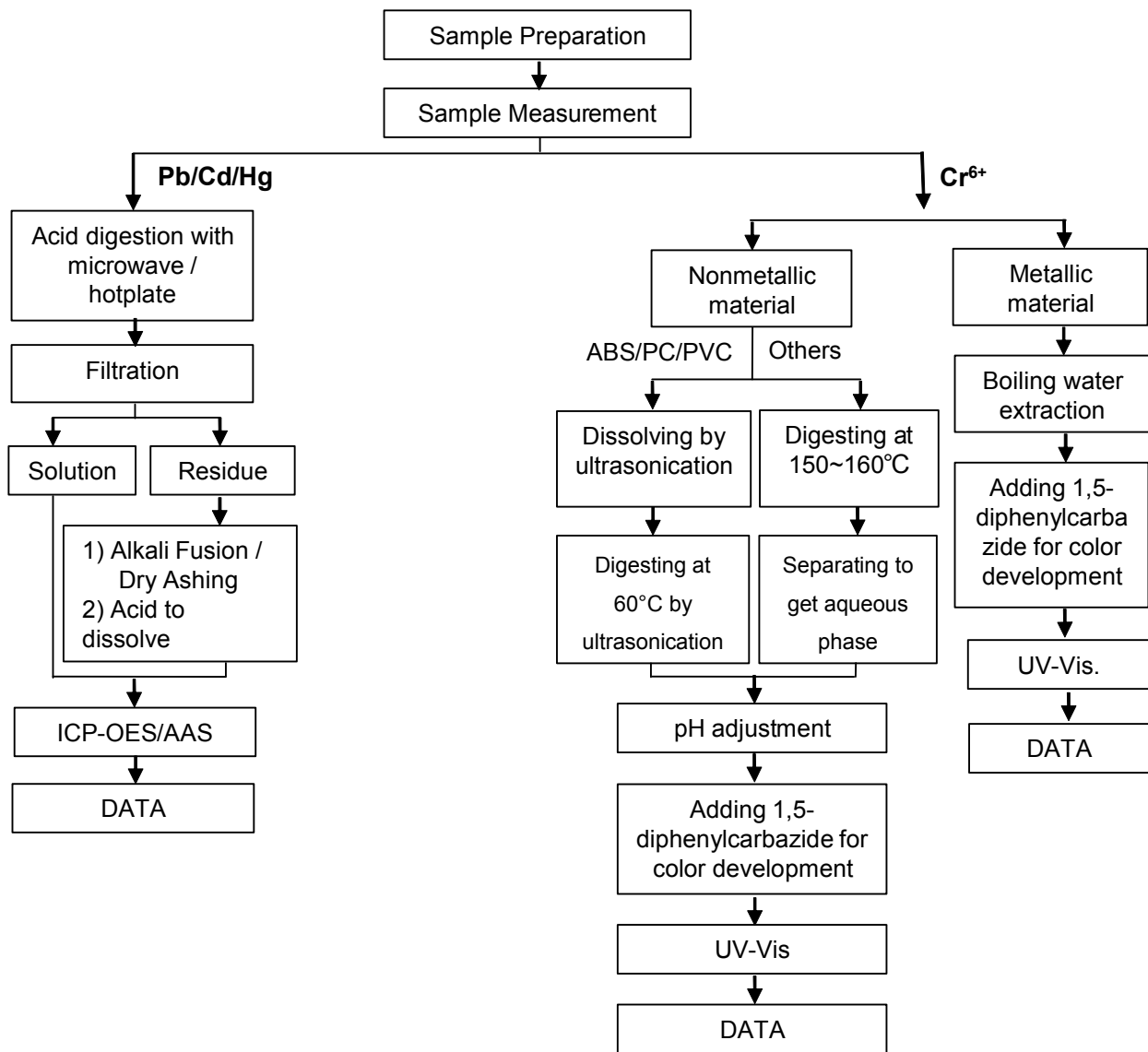
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com

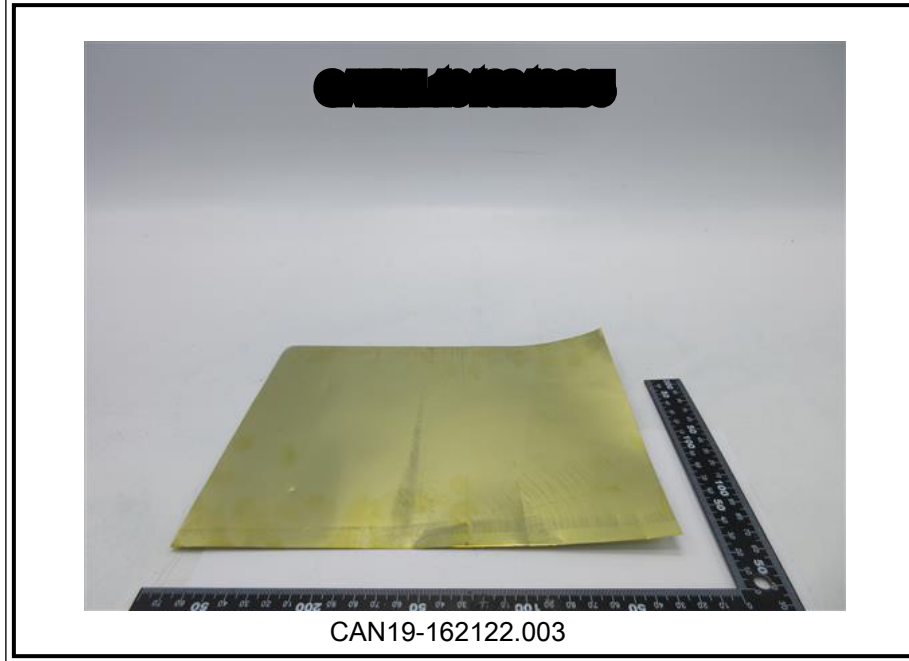
ATTACHMENTS

Pb/Cd/Hg/Cr⁶⁺ Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr⁶⁺ test method excluded).



Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***