

### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 1 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 以下測試樣品係由客户送樣,且由客户聲稱並經客户確認如下

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

樣品名稱(Sample Description) 台塑鋼 (FORMOCON)

樣品型號(Style/Item No.) FM270

樣品材質(Material Component) 聚甲醛 (POLYOXYMETHYLENE(POM))

收件日期(Sample Receiving Date) 2013/01/11

測試期間(Testing Period) : 2013/01/11 TO 2013/01/17

送樣廠商(Sample Submitted By) 台灣塑膠工業股份有限公司 (FORMOSA PLASTICS CORPORATION)

測試結果(Test Results) : 請見下一頁 (Please refer to next pages).

Ray Chang / Asst. Manage Signed for and on behalf of **SGS Taiwan Limited** 

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company,除非另有說明,此戰告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 the transaction documents. This document cannot be reproduced eacept in the fullest extent of the law.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司

t + 886 (07)301 2121



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 2 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 測試結果(Test Results)

測試部位(PARTNAME)NO.1 : 白色 台塑鋼 (WHITE FORMOCON)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
鎘 / Cadmium (Cd)	mg/kg	参考IEC 62321: 2008方法,用感應藕合電漿原子發射光譜儀檢測. / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg	参考IEC 62321: 2008方法, 用感應藕合電漿原子發射光譜儀檢測. / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
汞 / Mercury (Hg)	mg/kg	参考IEC 62321: 2008方法, 用感應藕合電漿原子發射光譜儀檢測. / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
六價络 / Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	参考IEC 62321: 2008方法,用UV-VIS檢測. / With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.
多溴聯苯總和 / Sum of PBBs			-	n.d.
一溴聯苯 / Monobromobiphenyl	1		5	n.d.
二溴聯苯 / Dibromobiphenyl	1		5	n.d.
三溴聯苯 / Tribromobiphenyl	1		5	n.d.
四溴聯苯 / Tetrabromobiphenyl	1	参考IEC 62321: 2008方法,以氣相層析儀/質譜儀	5	n.d.
五溴聯苯 / Pentabromobiphenyl	mg/kg	檢測. / With reference to IEC 62321: 2008 and	5	n.d.
六溴聯苯 / Hexabromobiphenyl	1	performed by GC/MS.	5	n.d.
七溴聯苯 / Heptabromobiphenyl	1		5	n.d.
八溴聯苯 / Octabromobiphenyl	1		5	n.d.
九溴聯苯 / Nonabromobiphenyl	1		5	n.d.
十溴聯苯 / Decabromobiphenyl			5	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document cannot be reproduced except to low, makes a constant of the law. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Talwan Ltd. No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



# 測試報告 **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 3 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
多溴聯苯醚總和 / Sum of PBDEs			-	n.d.
一溴聯苯醚 / Monobromodiphenyl ether			5	n.d.
二溴聯苯醚 / Dibromodiphenyl ether			5	n.d.
三溴聯苯醚 / Tribromodiphenyl ether			5	n.d.
四溴聯苯醚 / Tetrabromodiphenyl ether		   參考IEC 62321: 2008方法, 以氣相層析儀/質譜儀	5	n.d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg	檢測. / With reference to IEC 62321: 2008 and	5	n.d.
六溴聯苯醚 / Hexabromodiphenyl ether		performed by GC/MS.	5	n.d.
七溴聯苯醚 / Heptabromodiphenyl ether	-		5	n.d.
八溴聯苯醚 / Octabromodiphenyl ether			5	n.d.
九溴聯苯醚 / Nonabromodiphenyl ether	-		5	n.d.
十溴聯苯醚 / Decabromodiphenyl ether	-		5	n.d.
鈹 / Beryllium (Be)	mg/kg	參考US EPA 3052方法,用感應藕合電漿原子發射光 譜儀檢測鈹含量. / With reference to US EPA Method 3052 for Beryllium Content. Analysis was performed by ICP-AES.	2	n.d.
神 / Arsenic (As) (Note 9)	mg/kg	參考SGS内部方法RSTS-EE-SVHC-004, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method- RSTS-EE-SVHC-004. Analyzed by ICP-AES.	2	n.d.
五氧化二砷 / Diarsenic pentaoxide*** (CAS No.: 1303-28-2)	mg/kg	參考SGS内部方法RSTS-EE-SVHC-004, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method- RSTS-EE-SVHC-004. Analyzed by ICP-AES.	-	n.d.
三氧化二砷 / Diarsenic trioxide*** (CAS No.: 1327-53-3)	mg/kg	參考SGS内部方法RSTS-EE-SVHC-004, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method- RSTS-EE-SVHC-004. Analyzed by ICP-AES.	-	n.d.
砌 / Boron (B) (Note 9)	mg/kg	參考SGS内部方法RSTS-EE-SVHC-004, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method- RSTS-EE-SVHC-004. Analyzed by ICP-AES.	2	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 4 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
硼酸 / Boric acid*** (CAS No.: 10043-35-3; 11113-50-1)	mg/kg	参考SGS内部方法RSTS-EE-SVHC-004, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method- RSTS-EE-SVHC-004. Analyzed by ICP-AES.	-	n.d.
無水四硼酸二鈉 / Disodium tetraborate, anhydrous*** (CAS No.: 1303-96-4, 1330- 43-4, 12179-04-3)	mg/kg	參考SGS内部方法RSTS-EE-SVHC-004, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method- RSTS-EE-SVHC-004. Analyzed by ICP-AES.	-	n.d.
水合硼酸鈉 / Tetraboron disodium heptaoxide, hydrate (CAS No.: 12267-73- 1) (Note 7)	mg/kg	參考SGS内部方法RSTS-EE-SVHC-004, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method- RSTS-EE-SVHC-004. Analyzed by ICP-AES.	-	n.d.
二氯化鈷 / Cobalt dichloride (CAS No.: 007646-79-9)	mg/kg	参考SGS内部方法RSTS-EE-SVHC-007, 以感應耦合電 漿原子發射光譜儀檢測. / SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES.	50	n.d.
鹵素 (氣) / Halogen-Chlorine (C1) (CAS No.: 22537-15-1)	mg/kg	参考BS EN 14582:2007, 以離子層析儀分析. / With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.
鹵素(溴)/ Halogen-Bromine (Br) (CAS No.: 10097-32-2)	mg/kg	参考BS EN 14582:2007, 以離子層析儀分析./ With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.
多氣聯苯 / Polychlorinated Biphenyls (PCBs)	mg/kg	参考US EPA 3540C方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 3540C method. Analysis was performed by GC/MS.	0.5	n.d.
多氣奈 / Polychlorinated Naphthalene (PCNs)	mg/kg	参考US EPA 3540C方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 3540C method. Analysis was performed by GC/MS.	5	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 5 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
多氣三聯苯 / Polychlorinated Terphenyls (PCTs)	mg/kg	参考US EPA 3540C方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 3540C method. Analysis was performed by GC/MS.	0.5	n.d.
短鍵氣化石蠟 / Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (CAS No.: 085535-84-8)	mg/kg	參考US EPA 3540C:1996方法,以氣相層析質譜儀/電子捕捉偵測器檢測. / With reference to US EPA 3540C:1996. Analyzed by GC/ECD.	100	n.d.
全氟辛烷磺酸 / Perfluorooctane sulfonates (PFOS - Acid, Metal Salt, Amide)	mg/kg	参考US EPA 3540C: 1996方法,以液相層析質譜儀 檢測全氟辛烷磺酸含量. / With reference to US EPA 3540C: 1996 method for PFOS Content. Analysis was performed by LC/MS.	10	n.d.
2-(3', 5'-二叔丁基-2'-羟基苯基)苯並三氮 唑 / 2-(3,5-di-tert-butyl-2- hydroxyphenyl)-2H-benzotriazole (CAS No.: 003846-71-7)	mg/kg	参考US EPA 3540C方法,以氣相層析質譜儀檢測之./ With reference to US EPA 3540C method. Analysis was performed by GC/MS.	5	n.d.
六溴環十二烷及所有主要被辨别出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ -HBCDD, $\beta$ -HBCDD, $\gamma$ -HBCDD) (CAS No.: 025637-99-4 and 003194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	mg/kg	參考US EPA 3540C:1996方法,以氣相層析質譜儀檢測. / With reference to US EPA 3540C:1996. Analyzed by GC/MS.	5	n.d.
磷酸三 (2-氯乙基)酯 / Tris(2- chloroethyl) phosphate (TCEP) (CAS No.: 115-96-8)	mg/kg	参考US EPA 3550C方法,以氣相層析/質譜儀(GC/MS)檢測. / With reference to US EPA 3550C method. Analysis was performed by GC/MS.	10	n.d.
富馬酸二甲酯 / Dimethyl Fumarate (CAS No.: 000624-49-7)	mg/kg	参考US EPA 3550C方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 3550C method. Analysis was performed by GC/MS.	0.1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 6 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
福馬林(甲醛)/ Formaldehyde (CAS No.: 000050-00-0)	mg/kg	參考ISO 17226-1(2008)方法,以高效液相層析儀/ 二極體陣列偵測器檢測. / With reference to ISO 17226-1(2008). Analysis was performed by HPLC/DAD.	3	n.d.
聚氯乙烯 / PVC	**	以紅外光譜分析及焰色法檢測. / Analysis was performed by FTIR and FLAME Test.	-	Negative
對特辛基苯酚 / 辛基酚 / 4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol) (CAS No.: 140-66-9)	mg/kg	參考US EPA 3550C方法,以液相層析/質譜儀檢測. / With reference to US EPA 3550C. Analysis by LC/MS.	10	n.d.
双(2-甲氧基乙基)醚 / Bis(2-methoxyethyl) ether (CAS No.: 111-96-6)	mg/kg	参考US EPA 3550C方法,以氣相層析/質譜儀檢測. / With reference to US EPA 3550C. Analysis by GC/MS.	10	n.d.
N,N-二甲基乙醯胺 / N,N-dimethylacetamide (DMAC) (CAS No.: 127-19-5)	mg/kg	参考US EPA 3550C方法,以氣相層析/質譜儀檢測. / With reference to US EPA 3550C. Analysis by GC/MS.	1	n.d.
有機錫 / Organic-tin compounds				
三丁基錫 / Tributyl Tin (TBT) (CAS No.: 000688-73-3)			0.03	n.d.
三苯基錫 / Triphenyl Tin (TphT) (CAS No.: 000668-34-8)	/1	本測試參考DIN 38407-13方法,以氣相層析儀/火焰	0.03	n.d.
二丁基錫 / Dibutyl Tin (DBT)	mg/kg	光度偵測器檢測. / With reference to DIN 38407-13. Analysis was performed by GC/FPD.	0.03	n.d.
二辛基錫 / Dioctyl Tin (DOT)			0.03	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 7 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
石棉 / Asbestos				
陽起石 / Actinolite (CAS No.: 77536-66- 4)			-	Negative
斜方角閃石 / Anthophyllite (CAS No.: 77536-67-5)		参考EPA 600/R-93/116 / 立體顯微鏡 (SM), 分散	-	Negative
棕石棉 / Amosite (CAS No.: 12172-73-5)		染色式偏光顯微鏡 (DS-PLM)及X光繞射光譜分析法 (XRD) / With reference to EPA 600/R-93/116	-	Negative
白石棉 / Chrysotile (CAS No.: 12001-29- 5)	%	method. Analysis was performed by Stereo Microscope (SM), Dispersion Staining Polarized Light Microscope (DS-PLM) and X-ray	-	Negative
青石棉 / Crocidolite (CAS No.: 12001-28- 4)		Diffraction Spectrometer (XRD).		Negative
透閃石 / Tremolite (CAS No.: 77536-68-6)			-	Negative
偶氮 (AZO)				
1): 4-氨基二苯 / 4-AMINODIPHENYL (CAS No.: 92-67-1)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
2): 聯苯胺 / BENZIDINE (CAS No.: 92-87- 5)	mg/kg	参考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
3): 4-氯鄰甲苯胺 / 4-CHLORO-O-TOLUIDINE (CAS No.: 95-69-2)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
4): 2-萘胺 / 2-NAPHTHYLAMINE (CAS No.: 91-59-8)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
5): 鄰氨基二甲基偶氮 / O-AMINOAZOTOLUENE (CAS No.: 97-56-3)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司

t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 8 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
6): 對硝基鄰甲苯胺 / 2-AMINO-4- NITROTOLUENE (CAS No.: 99-55-8)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
7): 對氣苯胺 / P-CHLOROANILINE (CAS No.: 106-47-8)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
8): 4-甲氧基-間苯二胺 / 2,4- DIAMINOANISOLE (CAS No.: 615-05-4)	mg/kg	参考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
9): 4,4'-二氨基二苯甲烷 / 4,4'- DIAMINODIPHENYLMETHANE (CAS No.: 101-77- 9)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
10): 3,3'-二氯聯苯胺 / 3,3'- DICHLOROBENZIDINE (CAS No.: 91-94-1)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
11): 3,3'-二甲氧基聯苯胺 / 3,3'- DIMETHOXYBENZIDINE (CAS No.: 119-90-4)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
12): 3,3'-二甲基聯苯胺 / 3,3'- DIMETHYLBENZIDINE (CAS No.: 119-93-7)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
13): 3,3'-二甲基-4,4'-二氨基二苯甲烷 / 3,3'-DIMETHYL-4,4'- DIAMINODIPHENYLMETHANE (CAS No.: 838-88-0)	mg/kg	参考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
14): 2-甲氧基-5-甲基聯苯 / P-CRESIDINE (2-METHOXY-5-METHYLANILINE) (CAS No.: 120-71-8)	mg/kg	参考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
15): 4,4'-亞甲基雙(氯苯胺)/ 4,4'- METHYLENE-BIS- (2-CHLOROANILINE) (CAS No.: 101-14-4)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
SG Talwan Ltd.
No. 61, Kai-fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /
台灣檢輸科技股份有限公司
t + 886 (07)301 2121
f - 886 (07)3010887



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 9 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
16): 4,4'-氧化雙苯胺 / 4,4'-OXYDIANILINE (CAS No.: 101-80-4)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
17): 4,4'-硫代雙苯胺 / 4,4'- THIODIANILINE (CAS No.: 139-65-1)	mg/kg	参考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
18): 鄰甲苯胺 / O-TOLUIDINE (CAS No.: 95-53-4)	mg/kg	参考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
19): 2,4-二氨基甲苯 / 2,4- TOLUYLENEDIAMINE (CAS No.: 95-80-7)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
20): 2,4,5-三甲基苯胺 / 2,4,5- TRIMETHYLANILINE (CAS No.: 137-17-7)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
21): 鄰位甲氧基苯胺 / O-ANISIDINE (CAS No.: 90-04-0)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
22): 對氨基偶氮苯 / P-AMINOAZOBENZENE (CAS No.: 60-09-3)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
23): 2,4-二甲基苯胺 / 2,4-XYLIDINE (CAS No.: 95-68-1)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.
24): 2,6-二甲基苯胺 / 2,6-XYLIDINE (CAS No.: 87-62-7)	mg/kg	參考LFGB 82.02-2方法,以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2. Analysis was performed by GC/MS.	3	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 10 of 45

台灣塑膠工業股份有限公司

FORMOSA PLASTICS CORPORATION

台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
Phthalates				
鄰苯二甲酸二丁酯 /			0.003	n.d.
DBP (Dibutyl phthalate)				
(CAS No.: 000084-74-2)				
鄰苯二甲酸甲苯基丁酯 /			0.003	n.d.
BBP (Benzyl butyl phthalate)				
(CAS No.: 000085-68-7)				
鄰苯二甲酸二 (2-乙基己基)酯 /			0.003	n.d.
DEHP (Di- (2-ethylhexyl) phthalate)				
(CAS No.: 000117-81-7)				
鄰苯二甲酸二正辛酯 /			0.003	n.d.
DNOP (Di-n-octyl phthalate)				
(CAS No.: 000117-84-0)			0.01	
鄰苯二甲酸二異壬酯 /				n.d.
DINP (Di-isononyl phthalate)				
(CAS No.: 028553-12-0)				
鄰苯二甲酸二異癸酯 /			0.01	n.d.
DIDP (Di-isodecyl phthalate)		本測試參考EN 14372, 以氣相層析儀/質譜儀檢測	0.003	
(CAS No.: 026761-40-0)	%	之. / With reference to EN 14372. Analysis		
鄰苯二甲酸二異丁酯 /		was performed by GC/MS.		n.d.
DIBP (Di-isobutyl phthalate)				
(CAS No.: 000084-69-5)				
鄰苯二甲酸二己酯 /			0.003	n.d.
DNHP (Di-n-hexyl phthalate)				
(CAS No.: 84-75-3)				
鄰苯二甲酸二 (C6-8支鏈與直鏈)烷基酯,富			0.01	n.d.
C7 / DIHP (1,2-Benzenedicarboxylic acid,				
di-C6-8-branched alkyl esters, C7-rich)				
(CAS No.: 71888-89-6)				
鄰苯二甲酸二 (C7-11支鏈與直鏈)烷基酯 /			0.01	n.d.
DHNUP (1,2-Benzenedicarboxylic acid, di-				
C7-11-branched and linear alkyl esters)				
(CAS No.: 68515-42-4)				
鄰苯二甲酸二(2-甲氧基乙基)酯 /			0.003	n.d.
DMEP (Bis (2-methoxyethyl) phthalate)				
(CAS No.: 000117-82-8)				

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
SG Talwan Ltd.
No. 61, Kai-fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /
台灣檢輸科技股份有限公司
t + 886 (07)301 2121
f - 886 (07)3010887



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 11 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN 測試項目 單位 測試方法 (Test Items) (Unit) (Method) 氫氯碳化物 / HFCs (Hydrofluorocarbon)

<u> 乳峽化物 / HFCs (Hydrofluorocarbon)</u>				
氫氟碳化物(HFC)-23 (CHF3)(CAS No.: 75- 46-7)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-32 (CH2F2)(CAS No.: 75- 10-5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-41 (CH3F)(CAS No.: 593- 53-3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-43-10mee (C5H2F10)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-125 (C2HF5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-134 (C2H2F4)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-134a (CH2FCF3)(CAS No.: 811-97-2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-143 (CH3F3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121

www.tw.sgs.com

方法偵測

極限値

(MDL)

結果

(Result)

NO.1



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 12 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
氫氟碳化物(HFC)-143a (CH3F3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-152a (C2H4F2)(CAS No.: 75-37-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-227ea (C3HF7)(CAS No.: 431-89-0)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-236ea (C3H2F6)(CAS No.: 431-63-0)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-236fa (C3H2F6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-245ca (C3H3F5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氫氟碳化物(HFC)-245fa (C3H3F5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氢氟碳化物(HFC)-365mfc (C4H5F5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 13 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
全氣碳化物 / PFCs (Perfluorocarbon)				2,111
四氟甲烷 / F14 (CAS No.: 000075-73-0)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
六氟乙烷 / Fluorocarbon 116 (CAS No.: 000076-16-4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
八氟丙烷 / Freon 218 (CAS No.: 000076- 19-7)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
十氟丁烷 / Decafluorobutane (CAS No.: 000355-25-9)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
入氟環丁烷 / Freon C318 (CAS No.: 000115-25-3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
全氟-1-丁烯 / Perfluor-1-butene (CAS No.: 000357-26-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
全氟異丁烯 / perfluorisobutene (CAS No.: 000382-21-8)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,4-二氫八氟丁烷 / 1,4- dihydrooctafluorobutane (CAS No.: 000377-36-6)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 14 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
			n.d.
mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
	mg/kg mg/kg mg/kg mg/kg mg/kg	(Wethod)  mg/kg	### Mind Arguments (Method)

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 15 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
氟氯碳化物(Chlorofluorocarbon)-115 (CAS No.: 76-15-3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
Group III				n.d.
氟氯碳化物(Chlorofluorocarbon)-13 (CAS No.: 75-72-9)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-111 (CAS No.: 354-56-3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-112 (CAS No.: 76-12-0)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-211 (CAS No.: 422-78-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-212 (CAS No.: 3182-26-1)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-213 (CAS No.: 2354-06-5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-214 (CAS No.: 29255-31-0)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



# **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 16 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
氟氟碳化物(Chlorofluorocarbon)-215 (CAS No.: 4259-43-2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-216 (CAS No.: 661-97-2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯碳化物(Chlorofluorocarbon)-217 (CAS No.: 422-86-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物 / HCFCs (Hydrochlorofluorocarbons)				
氟氟氫碳化物(HCFC)-21 (CAS No.: 75-43-4)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-22 (CAS No.: 75-45-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-31 (CAS No.: 593-70-4)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-121 (CAS No.: 354-14-3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-122 (CAS No.: 354-21- 2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 17 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
氟氧氫碳化物(HCFC)-123 (CAS No.: 306-83- 2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-124 (CAS No.: 2837- 89-0)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-131 (CAS No.: 359-28-4)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-132b (CAS No.: 1649- 08-7)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-133a (CAS No.: 75-88- 7)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-141b (CAS No.: 1717-00-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-142b (CAS No.: 75-68- 3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-221 (CAS No.: 422-26- 4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 18 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
氟氯氫碳化物(HCFC)-222 (CAS No.: 422-49- 1)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-223 (CAS No.: 422-52-6)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-224 (CAS No.: 422-54-8)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-225ca (CAS No.: 422-56-0)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-225cb (CAS No.: 507- 55-1)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-226 (CAS No.: 431-87-8)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氣氫碳化物(HCFC)-231 (CAS No.: 421-94- 3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-232 (CAS No.: 460-89- 9)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氧氫碳化物(HCFC)-233 (CAS No.: 7125-84-0)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company,除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. 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 Jaw.

\*\*SCST\*\* alwan Ltd.\*\*

\*\*SCST\*\* alwan Ltd.\*\*

\*\*SCST\*\* alwan Ltd.\*\*

\*\*A to R.6. it, &a Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / ScST\*\*

\*\*A to R.6. it, &a Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / ScST\*\*

\*\*A to R.6. it, &a Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / ScST\*\*

\*\*A to R.6. it, &a Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / ScST\*\*

\*\*A to R.6. it, &a Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / ScST\*\*

\*\*A to R.6. it, &a Fa Road, Nanzih Export Processing Zone, Kaohsiung, Taiwan / ScST\*\*

\*\*A to R.6. it, &a Fa Road, Nanzih Export P

 分灣檢驗科技股份有限公司
 t + 886 (07)301 2121
 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 19 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
氟氯氫碳化物(HCFC)-234 (CAS No.: 425-94- 5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-235 (CAS No.: 460-92- 4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-241(CAS No.: 666-27-3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氣氫碳化物(HCFC)-242 (CAS No.: 460-63- 9)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-243 (CAS No.: 460-69- 5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-244	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-251 (CAS No.: 421-41- 0)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氟氫碳化物(HCFC)-252 (CAS No.: 819-00- 1)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 20 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
氟氯氫碳化物(HCFC)-253 (CAS No.: 460-35- 5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氢碳化物(HCFC)-261 (CAS No.: 420-97- 3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-262 (CAS No.: 421-02- 03)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氟氯氫碳化物(HCFC)-271 (CAS No.: 430-55- 7)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
海龍 (Halons)				
海龍(Halon)-1211 (CAS No.: 000353-59-3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
海龍(Halon)-1301 (CAS No.: 000075-63-8)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
海龍(Halon)-2402 (CAS No.: 000124-73-2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氣溴化物 / HBFCs (Hydrobromofluorocarbons)				
不完全鹵化氟溴化物(HBFC)-21B2 (CHFBr2) (CAS No.: 001868-53-7)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
SG Talwan Ltd.
No. 61, Kai-fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /
台灣檢輸科技股份有限公司
t + 886 (07)301 2121
f - 886 (07)3010887



# 測試報告 **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 21 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION

台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
不完全鹵化氟溴化物(HBFC)-22B1 (CHF2Br) (CAS No.: 001511-62-2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-31B1 (CH2FBr) (CAS No.: 000373-52-4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-121B4 (C2HFBr4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-122B3 (C2HF2Br3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-123B2 (C2HF3Br2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測./ With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-124B1 (C2HF4Br)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-131B3 (C2H2FBr3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-132B2 (C2H2F2Br2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-133B1 (C2H2F3Br)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



# 測試報告 **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 22 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
不完全鹵化氟溴化物(HBFC)-141B2 (C2H3FBr2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氣溴化物(HBFC)-142B1 (C2H3F2Br)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-151B1 (C2H4FBr)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-221B6 (C3HFBr6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-222B5 (C3HF2Br5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-223B4 (C3HF3Br4)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-224B3 (C3HF4Br3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-225B2 (C3HF5Br2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測./ With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-226B1 (C3HF6Br)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 23 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
不完全鹵化氟溴化物(HBFC)-231B5 (C3H2FBr5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氣溴化物(HBFC)-232B4 (C3H2F2Br4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-233B3 (C3H2F3Br3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-234B2 (C3H2F4Br2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-235B1 (C3H2F5Br)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-241B4 (C3H3FBr4)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-242B3 (C3H3F2Br3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-243B2 (C3H3F3Br2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-244B1 (C3H3F4Br)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 24 of 45

台灣塑膠工業股份有限公司

FORMOSA PLASTICS CORPORATION

台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
不完全鹵化氣溴化物(HBFC)-251B3 (C3H4FBr3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-252B2 (C3H4F2Br2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-253B1 (C3H4F3Br)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-261B2 (C3H5FBr2)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-262B1 (C3H5F2Br)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
不完全鹵化氟溴化物(HBFC)-271B1 (C3H6FBr)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氯化碳氫化物 / CHCs (Chlorinate hydrocarbon)				
1,1,1,2-四氯乙烷 / 1,1,1,2- Tetrachloroethane (CAS No.: 630-20-6)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 25 of 45

台灣塑膠工業股份有限公司

FORMOSA PLASTICS CORPORATION

台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
1,1,1-三氯乙烷 / 1,1,1-Trichloroethane (CAS No.: 71-55-6)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,1,2,2-四氯乙烷 / 1,1,2,2- Tetrachloroethane (CAS No.: 79-34-5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,1,2-三氯乙烷 / 1,1,2-Trichloroethane (CAS No.: 79-00-5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,1-二氯乙烷 / 1,1-Dichloroethane (CAS No.: 75-34-3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,1-二氯乙烯 / 1,1-Dichloroethene (CAS No.: 75-35-4)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,1-二氯丙烯 / 1,1-Dichloropropene (CAS No.: 563-58-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,2,3-三氯丙烷 / 1,2,3-Trichloropropane (CAS No.: 96-18-4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,2-二氯乙烷 / 1,2-Dichloroethane (CAS No.: 107-06-2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司

t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 26 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
1,2-二氯丙烷 / 1,2-Dichloropropane (CAS No.: 78-87-5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
1,3-二氯丙烷 / 1,3-Dichloropropane (CAS No.: 142-28-9)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
2,2-二氯丙烷 / 2,2-Dichloropropane (CAS No.: 594-20-7)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
四氣甲烷(四氯化碳) / Carbon tetrachloride (CAS No.: 56-23-5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氣乙烷 / Chloroethane (CAS No.: 75-00-3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氣仿 / Chloroform (CAS No.: 67-66-3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
氣甲烷 / Chloromethane (CAS No.: 74-87-3)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
順-1,2-二氯乙烯 / cis-1,2-Dichloroethene (CAS No.: 156-59-2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



## **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 27 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) NO.1
順-1,3-二氯丙烯 / cis-1,3- Dichloropropene (CAS No.: 10061-01-5)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
六氣丁二烯 / Hexachlorobutadiene (CAS No.: 87-68-3)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
二氯甲烷 / Dichloromethane (CAS No.: 75-09-2)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
四氟乙烯 / Tetrachloroethene (CAS No.: 127-18-4)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
反-1,2-二氯乙烯 / trans-1,2- Dichloroethene (CAS No.: 156-60-5)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
反-1,3-二氯丙烯 / trans-1,3- Dichloropropene (CAS No.: 10061-02-6)	mg/kg	参考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
三氯乙烯 / Trichloroethylene (CAS No.: 79-01-6)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.
溴甲烷 / Bromomethane (CAS No.: 74-83-9)	mg/kg	參考US EPA 5021方法,以氣相層析質譜儀(GC/MS) 檢測. / With reference to US EPA 5021 method. Analysis was performed by GC/MS.	1	n.d.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.
No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 28 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 備註(Note):

- 1. mg/kg = ppm ; 0.1 wt% = 1000 ppm
- 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)
- 7. 依據2005/84/EC所公布76/769/EEC指令之第22次修正會議提及,3種可塑劑DEHP,DBP與BBP之總含量不可大於0.1%,另3種可塑 劑DINP, DIDP及DNOP之總含量亦不可大於0.1%.

(Amending for the 22nd Council Directive 76/769/EEC notified under document 2005/84/EC, total concentration of three compounds DEHP, DBP and BBP shall not be greater than 0.1% and total concentration of three compounds DINP, DIDP and DNOP shall not be greater than 0.1%.)

8. \*\*\*: 該物質是由"三丁基錫"或各别元素 (例如: 砷、鉛、六價鉻或硼)之測試結果計算得知. 其MDL是針對"三丁基錫"或元素 (例如: 砷、鉛、六價鉻或硼)之評估. / The substance was calculated by the test results of Tributyl Tin or element (Ex. Arsenic, Lead, Cr(VI) or Boron respectively). The MDL was evaluated for Tributyl Tin or element (Ex. Arsenic, Lead, Cr(VI) or Boron respectively).

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company,除非另有說明,此戰告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 the transaction documents. This document cannot be reproduced eacept in the fullest extent of the jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the jaw.

SGS Taiwan Ltd. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Control Processing Zone , Control Processing Zone 高雄市楠梓加工出口區開發路61號

t + 886 (07)301 2121

台灣檢驗科技股份有限公司

Member of the SGS Group



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 29 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

9. 被萃取出的溶出硼/砷/鈷是以感應耦合電漿原子發射光譜儀檢測得之. / The extracted soluble Boron / Arsenic / Cobalt is detected by ICP-AES.

 $AX = A \times F$ 

AX	A	F
五氧化二砷 / Diarsenic pentaoxide	种 / Arsenic	1.5339
三氧化二砷 / Diarsenic trioxide		1.3203
三乙基砷酸鹽 / Triethyl arsenate		3.0179
砷酸氫鉛 / Lead hydrogen arsenate		4.6332
	鉛 / Lead	1.6753
三丁基錫氧化物 / Bis(tributyltin)oxide	三丁基錫 / Tributyl Tin (TBT)	1.0276
硼酸 / Boric acid	- 砌 / Boron (B)	5.7195
無水四硼酸二鈉 / Disodium tetraborate, anhydrous		4.6531
水合硼酸鈉(五水四硼酸二鈉) / Disodium tetraborate, pentahydrate		6.7361
水合硼酸鈉(十水四硼酸二鈉) / Disodium tetraborate, decahydrate		8.8191

- 10. 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) / Only anhydrous form of disodium tetraborate is relevant and considered according to ECHA explanation (Ref no.: INC 000000032519).
- 11. 鈹青銅是一種主要成份爲鈹及銅的合金,當偵測不到總鈹含量時,亦表示不含鈹青銅.

  (Since beryllium copper is a metal alloy of copper and beryllium and the test result is n.d. for beryllium, we can have conclusion that the beryllium copper is n.d..)
- 12. 石棉測試由SGS其他實驗室執行 (The Asbestos test was subcontracted to other SGS Laboratory. )
- 13. 聚氯乙烯測試由SGS其他實驗室執行 (The PVC test was subcontracted to other SGS Laboratory. )

#### 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 $\mu$ g/m²。(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  $1\mu$ g/m².)

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company,除非另有說明,此戰苦結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 experient parties to a transaction from exercising all their rights and obligations under

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 Jaw.

SGS Taiwan Ltd.

No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121 f + 886 (07)3010867



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 30 of 45

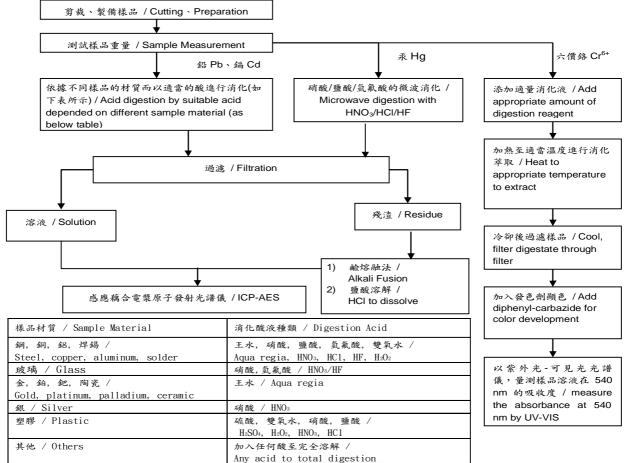
台灣塑膠工業股份有限公司

FORMOSA PLASTICS CORPORATION

台北市敦化北路201號8樓

8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

- 1) 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. (Cr<sup>6+</sup> test method excluded)
- 2) 测試人員:張俊雄 / Name of the person who made measurement: Alex Chang
- 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Note\*\*: (1) 針對非金屬材料加入鹼性消化液,加熱至 90~95℃萃取. / For non-metallic material, add alkaline digestion reagent and heat to 90~95°C.

(2) 針對金屬材料加入純水,加熱至沸騰萃取. / For metallic material, add pure water and heat to boiling.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company,除非另有說明,此戰告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 the transaction documents. This document cannot be reproduced eacept in the fullest extent of the jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the jaw.

SGS Taiwan Ltd. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / Ld. | No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Control Processing Zone , Control Processing Zone 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 31 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

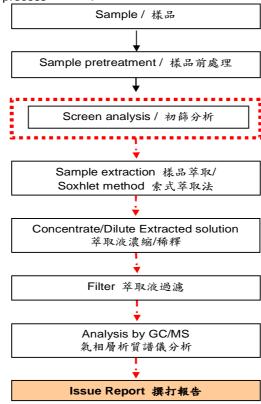
#### 多溴聯苯/多溴聯苯醚 分析流程圖 / PBB/PBDE analytical FLOW CHART

1)測試人員:曹嘉琪 / Name of the person who made measurement: Anson Tsao 2)測試負責人:張伯睿 / Name of the person in charge of measurement: Ray 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 - - - ▶



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced except in our minimum appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



### **Test Report**

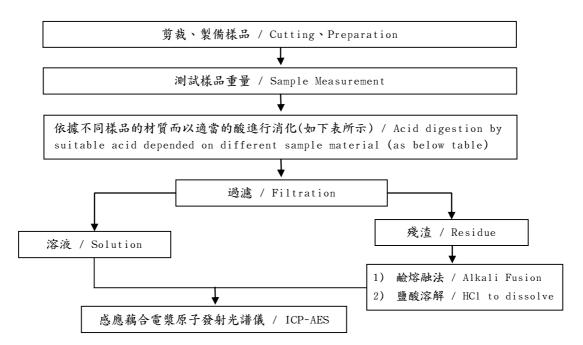
號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 32 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

- 1) 根據以下的流程圖之條件,樣品已完全溶解。 / These samples were dissolved totally by pre-conditioning method according to below flow chart.
- 2) 測試人員:張俊雄 / Name of the person who made measurement: Alex Chang
- 3) 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang

#### 元素以 ICP-AES 分析的消化流程圖

(Flow Chart of digestion for the elements analysis performed by ICP-AES)



鋼,銅,鋁,焊錫 / Steel, copper, aluminum, solder	王水,硝酸,鹽酸,氫氟酸,雙氧水 /
	Aqua regia, HNO3, HC1, HF, H2O2
玻璃 / Glass	硝酸,氫氟酸 / HNO3/HF
金,鉑,鈀,陶瓷 / Gold, platinum, palladium, ceramic	王水 / Aqua regia
銀 / Silver	硝酸 / HNO3
塑膠 / Plastic	硫酸,雙氧水,硝酸,鹽酸 / H2SO4, H2O2, HNO3, HC1
其他 / Others	加入任何酸至完全溶解 / Any acid to total digestion

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company,除非另有說明,此戰告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 the transaction documents. This document cannot be reproduced except in the fullest extent of the law.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

高雄市楠梓加工出口區開發路61號 t + 886 (07)301 2121 www.tw.sgs.com



### **Test Report**

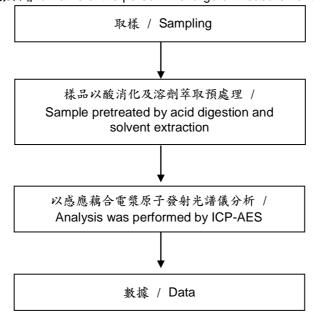
號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 33 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 二氯化鈷分析流程圖 / Analytical flow chart of Cobalt dichloride

1) 試入員:張俊雄/ Name of the person who made measurement: Alex Chang

2) 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carried be reproduced to the fullest extent of the law.

SGS Taiwan Ltd. No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



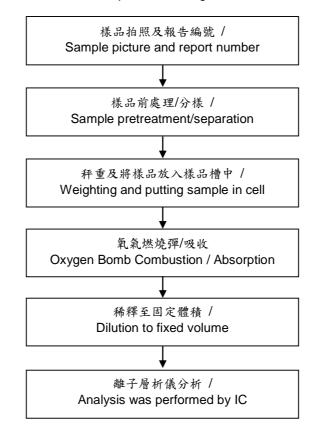
### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 34 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 鹵素分析流程圖 / Analytical flow chart of halogen content

- 1) 測試人員:洪秀真/ Name of the person who made measurement: Jean Hung
- 2) 測試負責人:張伯睿/ Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carried be reproduced to the fullest extent of the law.

SGS Taiwan Ltd. No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



### **Test Report**

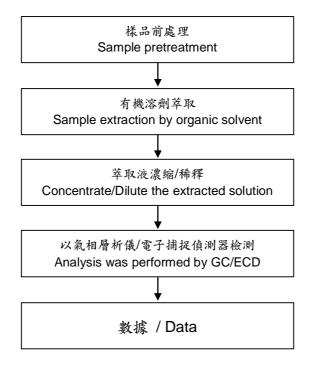
號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 35 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

### 含氯阻燃劑分析流程 /

### Chlorinated Flame retardant analytical flow chart

- 1) 測試人員: 曹嘉琪 / Name of the person who made measurement: Anson Tsao
- 2) 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang
  - 參考方法(Reference method): USEPA 3540
  - 測試項目(Test Items): PCBs, CP, MCCP / 多氯聯苯, 氯化石蠟, 中鏈氯化石蠟



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



### **Test Report**

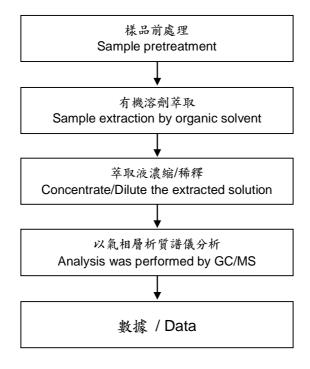
號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 36 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

### 含氯阻燃劑分析流程 /

### Chlorinated Flame retardant analytical flow chart

- 1) 測試人員:曹嘉琪 / Name of the person who made measurement: Anson Tsao
- 2) 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang
  - 参考方法(Reference method): US EPA 8270D, US EPA 3540
  - 測試項目(Test Items): PCNs, PCTs, Mirex / 多氯奈, 多氯三聯苯,滅蟻靈,



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



### **Test Report**

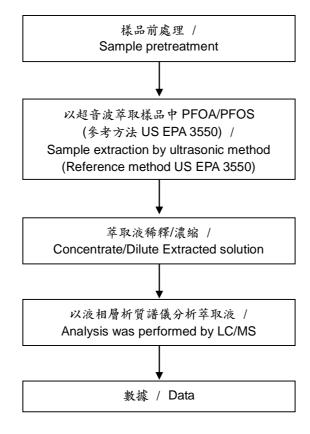
號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 37 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

### 全氟辛酸(銨)/ 全氟辛烷磺酸分析流程圖 / Analytical flow chart of PFOA/PFOS content

1)测試人員: 曹嘉琪 / Name of the person who made measurement: Anson Tsao

2)测試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance.

the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



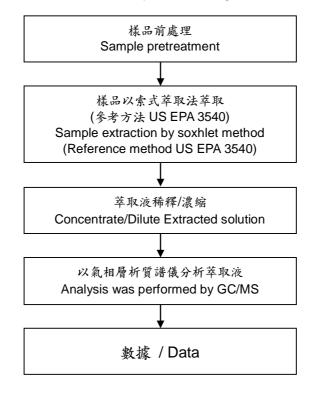
### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 38 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

### 苯並三唑類化合物分析流程圖 / Analytical flow chart of benzotriazole content

- 1) 測試人員: 曹嘉琪 / Name of the person who made measurement: Anson Tsao
- 2) 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carried be reproduced to the fullest extent of the law.

SGS Taiwan Ltd. No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



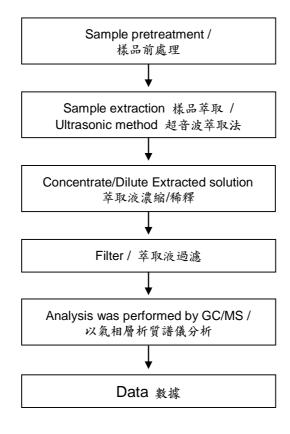
### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 39 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

### 六溴環十二烷分析流程圖 / HBCDD Analytical FLOW CHART

- 1) 測試人員: 曹嘉琪/ Name of the person who made measurement: Anson Tsao
- 2) 測試負責人:張伯睿/ Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



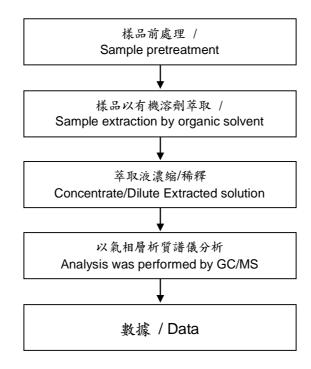
### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 40 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

### 富馬酸二甲酯分析流程圖 / **Analytical flow chart of Dimethyl Fumarate content**

- 1) 測試人員: 曹嘉琪 / Name of the person who made measurement: Anson Tsao
- 2) 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



### **Test Report**

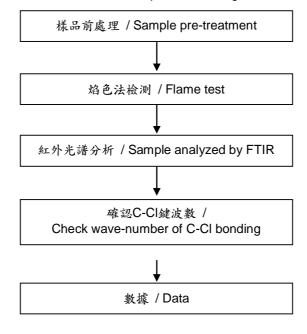
號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 41 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 聚氯乙烯物質判定分析流程圖 /

### Analysis flow chart for determination of PVC in material

1)測試人員:邱韻如 / Name of the person who made measurement: Joyce Chiu 2)測試負責人: 林立翔 / Name of the person in charge of measurement: Roger Lin



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



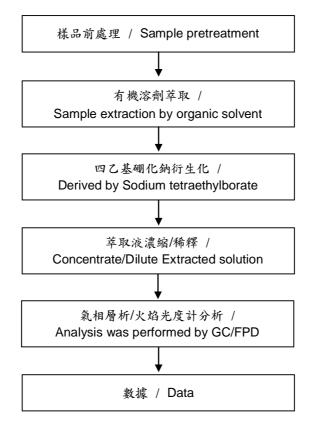
### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 42 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

### 有機錫分析流程圖 / Analytical flow chart of Organic-Tin content

- 1) 測試人員: 曹嘉琪 / Name of the person who made measurement: Anson Tsao
- 2) 測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carried be reproduced to the fullest extent of the law.

SGS Taiwan Ltd. No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

t + 886 (07)301 2121

台灣檢驗科技股份有限公司



### **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 43 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 石棉物質判定分析流程圖 / Analysis flow chart for determination of Asbestos

- 1) 測試人員:高鍵忠 / Name of the person who made measurement: Victor Kao
- 2) 測試負責人: 魏明芬 / Name of the person in charge of measurement: Wendy Wei 【参考方法(Reference method): EPA 600/R-93/116】

取樣 / Sampling 分樣及保存 / Transportation and Storage 分析樣品的製備 / Preparation of primary analytical sample 立體顯微鏡偵測 / SM Examination by Stereomicroscopy method 石棉偏光顯微鏡鑑定/PLM Asbestos identification by dispersion staining polarization light microscopy 偏光顯微鏡有疑慮時或是品保確認時,繼續後續鑑定 / Continue when problems are encountered with PLM and/or for quality assurance purposes 移除干擾基質 / Interference matrix removal 石棉偏光顯微鏡鑑定 / 石棉 X-ray 繞射定性鑑定 / Asbestos identification by dispersion Asbestos identification by X-ray staining polarization light microscopy diffraction method 含有石棉纖維 / 未含有石棉纖維 / Asbestos fiber is present Asbestos fiber is absent 含有石綿 / 不含有石綿 / Containing Asbestos/ Not containing Asbestos/ 陽性 / Positive 陰性 / Negative

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document cannot be reproduced except in the fullest extent of the law.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



### **Test Report**

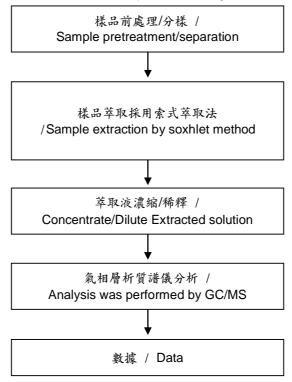
號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 44 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

#### 可塑劑分析流程圖 / Analytical flow chart of phthalate content

1)测試人員: 曹嘉琪 / Name of the person who made measurement: Anson Tsao

2)測試負責人:張伯睿 / Name of the person in charge of measurement: Ray Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan /

台灣檢驗科技股份有限公司 t + 886 (07)301 2121



## 測試報告 **Test Report**

號碼(No.): KA/2013/10805 日期(Date): 2013/01/17 頁數(Page): 45 of 45

台灣塑膠工業股份有限公司 FORMOSA PLASTICS CORPORATION 台北市敦化北路201號8樓 8F, NO. 201, TUN HUA N. ROAD, TAIPEI, TAIWAN

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

> > KA/2013/10805



\*\* 報告結尾 (End of Report) \*\*

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company.除非另有說明,此報告結果僅對測試之樣品負責。本報告未經本公司書面許可,不可部分複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms\_and\_conditions.htm">www.sgs.com/terms\_and\_conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 appearance of this document is appearance of this document is appearance. the transaction documents. This document carmon be reproduced assessment of the Jaw.

appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the Jaw.

SGS Taiwan Ltd. , No. 61, Kai-Fa Road, Nanzih Export Processing Zone , Kaohsiung, Taiwan / 高雄市楠梓加工出口區開發路61號

台灣檢驗科技股份有限公司 t + 886 (07)301 2121