

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 1 頁, 共 11 頁

台灣塑膠工業股份有限公司
高雄市仁武區水管路 100 號

以下測試樣品係由客戶送樣, 且由客戶聲稱並經客戶確認如下:

產品名稱 : 耐衝擊改質劑
產品顏色 : 白色
型號 : M-81
樣品材質 : 耐衝擊改質劑
送樣廠商 : 台灣塑膠工業股份有限公司
樣品接收日期 : 2019/01/21
測試期間 : 2019/01/21 ~ 2019/01/25

測試要求 : 依據客戶要求: 該測試依據華盛頓州兒童安全法案第 173-334 章所規範之對於兒童有危害之 85 項高關注化學品(CHCC)進行測試-報告出具規則符合 CHCC 風險評估的結果。

測 試 結 果 : 請參見下一頁

總結:

根據明確的範圍與分析技術, 那主要的 CHCC 汙染物濃度是小于 100ppm 在下頁材質類別的測試部件中。

通過

本報告為 KE/2019/10994 之加發報告, 報告加發日期 2019 年 01 月 25 日。

張伯睿
報告簽署人/張伯睿 博士/技術經理
化學實驗室-高雄



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, 不可部份複製。
This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 2 頁, 共 11 頁

備註:

1. 符合華盛頓州兒童安全法案第 173-334-080 章-通報規則; 於產品部件中所存在的每一個大於 100ppm CHCC 清單上的化學汙染物都必須出具於報告上。華盛頓法案第 173-334-110 章載明通告需求時程將逐步實施。
<http://apps.leg.wa.gov/WAC/default.aspx?cite=173-334-110> (通告需求時程)
2. 對於故意添加到產品組件中的 CHCC; 建議客戶藉由實際定量限值 (PQL) 去準確的鑑別其濃度。
http://www.ecy.wa.gov/programs/swfa/cspa/pdf/cspaguide_pql.pdf (報告出具準則-實際定量限值(PQLs))
3. 本測試報告之測試結果僅針對該測試樣品。

測試樣品:

樣品部件外觀描述:

材質類別	部件編號	描述
A	1	白色耐衝擊改質劑

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, 不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 3 頁, 共 11 頁

測試結果:

甲醛和乙醛

測試方法: 參考 ISO 17226-1 方法, 以高效液相層析儀/二極體陣列偵測器檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
甲醛	(50-00-0)	ND		3
乙醛	(75-07-0)	ND		3
結論		通過		--

偶氮染料

測試方法: 參考 EN 14362-1:2012 方法, 以氣相層析質譜儀/高效液相層析儀二極體陣列偵測器檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
苯胺	(62-53-3)	ND		5
鄰-甲苯胺	(95-53-4)	ND		5
2,4-二氨基甲苯	(95-80-7)	ND		5
4-氯苯胺	(106-47-8)	ND		5
3,3'-二甲基聯苯胺	(119-93-7)	ND		5
結論		通過		--

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, 不可部份複製。
 This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 4 頁, 共 11 頁

揮發性有機物

測試方法: 參考 USEPA 5021 方法, 以頂空氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)	MDL (ppm)
		1	
苯	(71-43-2)	ND	1
氯乙烯	(75-01-4)	ND	1
二氯甲烷	(75-09-2)	ND	1
1,1,2,2-四氯乙烷	(79-34-5)	ND	1
乙基苯	(100-41-4)	ND	1
苯乙烯	(100-42-5)	3.65	1
甲苯	(108-88-3)	ND	1
酚	(108-95-2)	ND	1
四氯乙烯	(127-18-4)	ND	1
N-甲基吡咯烷酮	(872-50-4)	ND	1
二硫化碳	(75-15-0)	ND	1
甲基乙基酮	(78-93-3)	ND	1
六氯丁二烯	(87-68-3)	ND	1
丙烯晴	(107-13-1)	ND	1
1,4-二氧六環	(123-91-1)	ND	1
結論		通過	--

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, 不可部份複製。
 This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 5 頁, 共 11 頁

可塑劑

測試方法: 參考 EN 14372 方法, 以氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
鄰苯二甲酸二乙酯 (DEP)	(84-66-2)	ND		30
鄰苯二甲酸二丁酯 (DBP)	(84-74-2)	ND		30
鄰苯二甲酸二正己酯 (DNHP)	(84-75-3)	ND		30
鄰苯二甲酸丁酯苯甲酯 (BBP)	(85-68-7)	ND		30
鄰苯二甲酸二(2-乙基己基)酯 (DEHP)	(117-81-7)	ND		30
鄰苯二甲酸二正辛酯 (DNOP)	(117-84-0)	ND		30
鄰苯二甲酸二異癸酯 (DIDP)	(26761-40-0)	ND		100
鄰苯二甲酸二異壬酯 (DINP)	(28553-12-0)	ND		100
鄰苯二甲酸二環己酯 (DCHP)	(84-61-7)	ND		30
鄰苯二甲酸二異丁酯 (DIBP)	(84-69-5)	ND		30
鄰苯二甲酸二(2-乙基甲氧基)酯 (DMEP)	(117-82-8)	ND		30
鄰苯二甲酸二戊酯 (DPP)	(131-18-0)	ND		30
結論		通過		--

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, 不可部份複製。
 This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 6 頁, 共 11 頁

防腐劑

測試方法: 溶劑萃取, 以高效液相層析儀質譜儀, 氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
對羥基苯甲酸丙酯	(94-13-3)	ND		10
對羥基苯甲酸丁酯	(94-26-8)	ND		10
對羥基苯甲酸甲酯	(99-76-3)	ND		10
對羥基苯甲酸	(99-96-7)	ND		10
對羥基苯甲酸乙酯	(120-47-8)	ND		10
2,2',4,4'-四羥基二苯甲酮	(131-55-5)	ND		10
2-乙基己基對甲氧基肉桂酸酯	(5466-77-3)	ND		10
2-乙基己酸	(149-57-5)	ND		5
結論		通過		--

重金屬

測試方法: 參考 USEPA 3052 方法, 用感應耦合電漿-光學放射光譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
汞	(7439-97-6)	ND		2
鎘	(7440-36-0)	ND		2
砷	(7440-38-2)	ND		2
鈷	(7440-48-4)	ND		2
鎳	(7440-43-9)	ND		2
結論		通過		--

全氟辛烷磺酸和其鹽類; PFOS

測試方法: 溶劑萃取, 以液相層析串聯質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
全氟辛烷磺酸	(1763-23-1)	ND		10
結論		通過		--

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, 不可部份複製。
 This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 7 頁, 共 11 頁

全氟辛酸(PFOA)跟相關物質

測試方法: 溶劑萃取, 以液相層析串聯質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
全氟辛酸(PFOA)跟相關物質	(335-67-1)	ND		10
結論		通過		--

酚

測試方法: 溶劑萃取, 以液相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
4-正壬基酚及其異構物	(104-40-5)	ND		10
壬基酚	(25154-52-3)	ND		10
4-壬基酚異構物	(84852-15-3)	ND		10
對特辛基苯酚	(140-66-9)	ND		10
4-辛基酚	(1806-26-4)	ND		10
結論		通過		--

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, 不可部份複製。
 This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

阻燃劑

測試方法: 溶劑萃取, 以氣相層析質譜儀及液相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
六溴環十二烷	(25637-99-4)	ND		20
十溴聯苯醚	(1163-19-5)	ND		20
四溴雙酚-A	(79-94-7)	ND		20
三(2-氯乙基)磷酸酯(TCEP)	(115-96-8)	ND		20
鄰酸三(1,3-二氯-2-丙基)酯(TDCPP)	(13674-87-8)	ND		20
磷酸三苯酯 (TPP)	(115-86-6)	ND		20
磷酸三(2,3-二溴異丙基)酯(TDBPP)	(126-72-7)	ND		20
磷酸三丁酯 (TNBP)	(126-73-8)	ND		20
2-乙基己基二苯基磷酸酯(EHDPP)	(1241-94-7)	ND		20
磷酸三甲苯酯 (TCP)	(1330-78-5)	ND		20
磷酸三(1-氯-2-丙基)酯(TCPP)	(13674-84-5)	ND		20
雙(2-乙基己基)四溴鄰苯二甲酸酯(TBPH)	(26040-51-7)	ND		20
2,2-雙(氯甲基)-三亞甲基-雙(2-氯乙基)磷酸酯] (V6)	(38051-10-4)	ND		20
異丙基化磷酸三苯酯(DBDPE)	(68937-41-7)	ND		20
十溴二苯乙烷 (DBDPE)	(84852-53-9)	ND		20
二異辛酯-2,3,4,5-四溴苯甲酸(TBB)	(183658-27-7)	ND		20
結論		通過		--

N-亞硝胺

測試方法: 參考 GB/ T 24153 方法,以氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
N-Nitrosodimethylamine	(62-75-9)	ND		0.5
N-Nitrosodiphenylamine	(86-30-6)	ND		0.5
結論		通過		--

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, 不可部份複製。
 This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 9 頁, 共 11 頁

乙二醇醚類

測試方法: 溶劑萃取, 以氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
2-甲氧基乙醇	(109-86-4)	ND		10
乙二醇甲醚	(110-80-5)	ND		10
乙二醇	(107-21-1)	ND		10
結論		通過		--

1-甲氧代-4-(2-丙烯基)苯

測試方法: 溶劑萃取, 以氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
1-甲氧代-4-(2-丙烯基)苯	(140-67-0)	ND		10
結論		通過		--

雙酚

測試方法: 溶劑萃取, 以液相層析串聯質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
雙酚 A	(80-05-7)	ND		1
雙酚 S	(80-09-1)	ND		1
雙酚 F	(620-92-8)	ND		1
結論		通過		--

有機氯化導染劑

測試方法: 參考 DIN 54232 方法, 以氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
六氯苯	(118-74-1)	ND		0.1
五氯苯	(608-93-5)	ND		0.1
結論		通過		--

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, 不可部份複製。
 This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

試驗報告

編號: KE/2019/11994A-01

日期: 2019/01/25

第 10 頁, 共 11 頁

C.I. 溶劑黃 14

測試方法: 參考 DIN 54231 方法, 以液相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
C.I. 溶劑黃 14	(842-07-9)	ND		15
結論		通過		--

丁基煙基茴香醚

測試方法: 參考 ASTM D4275 方法, 以氣相層析質譜儀檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
丁基煙基茴香醚	(25013-16-5)	ND		1
結論		通過		--

氯化石蠟

測試方法: 溶劑萃取, 以氣相層析儀/電子捕捉偵測器檢測。

物質名稱 (CAS No.)		濃度 (ppm)		MDL (ppm)
		1		
短鏈氯化石蠟 (SCCP)	(85535-84-8)	ND		50
氯化石蠟 (C10-C12)	(108171-26-2)	ND		50
結論		通過		--

注釋:

1. MDL = 方法偵測極限
2. 法規限值: 每一個 CHCC 汙染物為 100ppm
3. ND = 沒有偵測到(低於偵測極限)。

樣品照片:

KE/2019/11994



SGS 僅對原報告照片中的樣品負責

報告結束

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, 不可部份複製。
This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report 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. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.