

欣聖國際開發有限公司

Xinsheng International Development CO.,LTD



氟碳粉體塗料

Fluorocarbon Painting-Powder Coating

送審資料

案場名稱：

送審產品：



關於公司

欣聖國際開發有限公司

Xinsheng International Development CO.,LTD



欣聖國際開發有限公司成立於2020年位在台南地區，主要設計生產具超高耐候性能之影像圖騰彩繪樣式鋼鋁管板材料，以及各類工程客製化氟碳烤漆藝術彩繪塗裝代工，專注於設計開發超高耐候氟藝彩飾塗層技術材料製程服務，秉持著創新、誠信、專業、負責的服務精神，致力研發服務於業界超高耐候性能之視覺藝術應用產品及特殊塗料開發銷售。公司設計展示空間暨行政中心300餘坪，氟藝彩飾廠區占地面積3600餘坪，電腦調色塗料色控廠區500餘坪，大型粉體/氟碳塗裝加工廠區1000餘坪。並擁有多項商標專利技術製程及產品材料性能測試認證，以及海內外授權多家產品代理商及特約工程服務專業經銷團隊。



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高效表面塗裝技術

耐候性強：能在各種惡劣氣候下保持顏色和外觀的穩定性。

耐化學品腐蝕：能抵禦酸鹼劑和化學物質及酸雨日曬的侵蝕。

耐磨損和劃傷：能有效保護物體表面免受日常磨損和細微劃傷。

易清潔性：表面光滑細緻，不易粘附塵埃污漬，容易擦拭清潔。

檢測認證：通過多項SGS國際檢測單位嚴苛實驗耐候標準，符合歐盟ROHS認證及無八大重金屬殘留檢測，並獲得多國發明技術專利認證。

應用領域廣泛

建築和建材：用於建築帷幕牆、金屬門窗建材等，提供美觀和耐用的保護。

景觀設計：金屬格柵、帷幕牆板、雷雕金屬板等的外觀塗裝，具有超高耐候性和耐磨性。

公共藝術：3D幻變格柵屏風牆、雷雕彩飾金屬意象、管材與板材的完美共鳴設計。

家居產品：家飾及牆面等金屬部件，提升外觀質感和保護性。

工業設備：機械鈹金和金屬結構飾板，提供防腐和裝飾效果

技術優勢及專利

高附著力：專業處理技術能夠牢固附著在各種金屬表面上。

均勻覆蓋性：能夠均勻地塗覆高度膜厚達150 μ m的表面塗層。

視覺效果性：多層專利複合特殊開發氟碳塗料仿飾圖騰塗裝，高速鍵結組成細膩視覺藝術效果。

環保可持續：不含有害溶劑和揮發性有機化合物，符合歐盟國際環保標準。

快速固化：在加工烘烤過程中快速固化鍵結超高膜厚，提高生產效率和節省能源。

正本

臺南市政府 函

地址：臺南市新營區民治路36號
承辦人：郭芳秀
傳 真：06-6328395
聯絡電話：06-6373621 分機 615

720臺南市官田區二鎮里二鎮56之26號
受文者：欣聖國際開發有限公司

發文日期：中華民國110年09月23日
發文字號：府經工商字第11000189610號
類別：普通件
密等及解密條件或保密期限：
附件：收據乙紙及變更登記表乙份

主旨：貴公司於民國110年09月22日【收文日】申請增資、修正章程變更登記，經核符合規定，准予登記。

說明：

- 一、貴公司經營業務及設立工廠等事項，請分別依照有關法令之規定辦理。
- 二、處分相對人名稱：欣聖國際開發有限公司（代表人姓名：陳聖贊、身分證照號碼：D12196****）、公司統一編號：83162590、公司所在地：臺南市官田區二鎮里二鎮56之26號。
- 三、附規費收據一紙，嗣後凡向本府申請任何案件，請在申請書上註明公司統一編號83162590及檔案號碼（10021218）。
- 四、對本處分如不服應於接到本處分書之次日起30日內繕具訴願書送由本府陳轉經濟部提起訴願。

※依公司法第372條規定，外國公司在中華民國境內設立分公司者，應專撥其營業所用之資金，並指定代表為在中華民國境內之負責人。外國公司在中華民國境內之負責人於登記後，將前項資金發還外國公司，或任由外國公司收回者，處五年以下有期徒刑、拘役或科或併科新臺幣五十萬元以上二百五十萬元以下罰金。如經法院判決有罪確定後，由中央主管機關撤銷或廢止公司登記。

※依公司法第9條規定，公司應收之股款，股東並未實際繳納，而以申請文件表明收足，或股東雖已繳納而於登記後將股款發還股東，或任由股東收回者，公司負責人各處五年以下有期徒刑、拘役或科或併科新臺幣50萬元以上250萬元以下罰金。如經法院判決有罪確定，由中央主管



正本

臺南市政府經濟發展局 函

機關地址：730臺南市新營區民治路36號（民治市政中心）

承辦人：林裕庭

聯絡電話：06-6354648

傳真：06-6321260

臺南市官田區二鎮里二鎮56之26號

受文者：欣聖國際開發有限公司（負責人：陳聖贊 君）

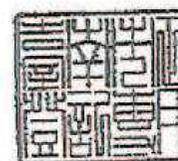
發文日期：中華民國110年04月08日

發文字號：南市經工商字第1100024873號

速別：普通件

密等及解密條件或保密期限：非密件

附件：工廠登記抄本及規費收據各乙紙



主旨：貴廠申請工廠登記乙案，符合規定准如所請，經核工廠登記編號為67002967，請查照。

說明：

一、依據貴廠110年03月11日（本局收文日）申請登記書件辦理。

二、核定工廠登記事項：

（一）工廠廠名：欣聖國際開發有限公司。

（二）工廠廠址：臺南市官田區二鎮里二鎮56之26號。

（三）工廠負責人：陳聖贊。

（四）工廠負責人住所或居所：臺南市西港區港東里雙張廂1號之10。

（五）產業類別：25金屬製品製造業。

（六）主要產品：259其他金屬製品(2599未分類其它金屬製品—白鐵製品、金屬零件)。

（七）生產設備用電：0瓩及12.26馬力。

（八）工廠用水量：0.02立方公尺／日。

（九）土地使用分區：（都市計畫）住宅區。

（十）用地類別：住宅未分區。

（十一）工廠廠地面積：64.36平方公尺（臺南市官田區二鎮段二鎮小段437之13地號部份使用）。

（十二）廠房面積：24.75平方公尺，建築物面積：0平方公尺。

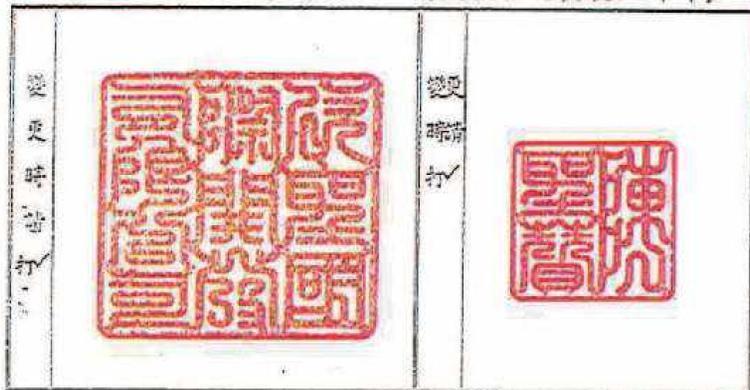
裝

訂

線

(公司印章) (代表公司負責人印章)

有限公司變更登記表



變更預查編號									
公司統一編號	8	3	1	6	2	5	9	0	
公司聯絡電話	(09)	1	2	1	0	0	7	4	9
僑外投資事業	<input type="checkbox"/>	是	<input checked="" type="checkbox"/>	否	一人公司	<input checked="" type="checkbox"/>	是	<input type="checkbox"/>	否
陸資	<input type="checkbox"/>	是	<input checked="" type="checkbox"/>	否					
原名稱									有限公司

印章請用油性印泥蓋章, 並勿超出框格。

一、公司名稱 (變更後)	中文	欣聖國際開發有限公司					
	(章程所訂) 外文						
二、(郵遞區號)公司所在地 (含鄉鎮市區村里)	(720)臺南市官田區二鎮里二鎮56之26號						
V 三、資本總額	新台幣	8,400,000元(阿拉伯數字)					
四、董事人數	1 人	五、代表人姓名	陳聖贊				
V 六、公司章程修正(訂定)日期	110年9月15日						
V 七、本次資本增加明細 (若資本為7者, 請加填第九欄位)	資產增加	1. 現金	8,000,000元				
		2. 財產	0元				
		3. 技術	0元				
	權益科目調整	4. 資本公積	0元				
		5. 法定盈餘公積	0元				
		6. 股息及紅利	0元				
	併購	7. 合併	0元				
	其他	8. 債權抵繳股款	0元				
						元	
八、本次資本減少明細	1. 彌補虧損	0元	2. 退還出資額	0元			
			0元				
九、被合併公司資料明細	合併基準日	統一編號	公司名稱				

※變更登記日期文號: 110.9.23 府經工商字第 11000189610 號 ※

公務記載蓋章欄

- (一)申請表一式二份, 於核辦後一份存核辦單位, 一份送還申請公司收執。
- (二)為配合電腦作業, 請打字或電腦以黑色列印填寫清楚, 數字部份請採用阿拉伯數字, 並請勿折疊、挖補、浮貼或塗改。
- (三)※各欄如變更登記日期文號、編號等, 申請人請勿填寫。
- (四)違反公司法代作資金導致公司資本不實, 公司負責人最高可處五年以下有期徒刑。
- (五)為配合郵政作業, 請於所在地加填郵遞區號。



臺南縣政府營利事業登記證

九三公字第 0九三0五五六0 號

營利事業統一編號：74229304

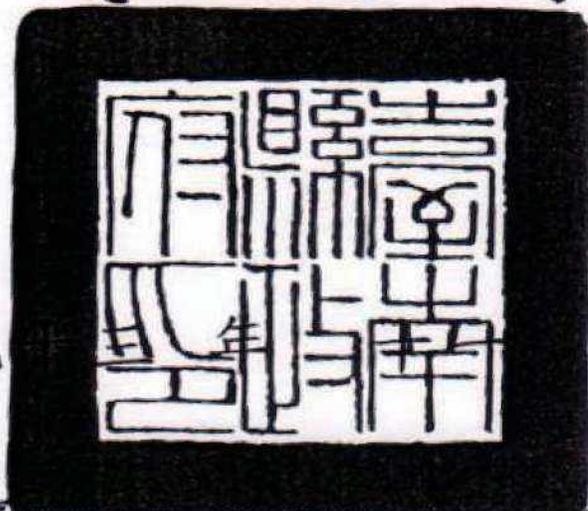
據 黃勝家 君 申請營利事業 變更 登記

本府已予登記特發給登記證並摘錄事項如下：

- 一、營利事業名稱：南寶樹脂化學工廠股份有限公司
- 二、資本額：登記新台幣捌億元整
實收新台幣貳億元整
- 三、負責人：黃勝家
- 四、組織：股份有限公司
- 五、所在地：臺南縣西港鄉南海村12號(所在地僅供辦公室使用)
- 六、核准設立登記日期：中華民國七十六年九月八日
- 七、營業項目：
 - 一、C801060 合成橡膠製造業
 - 二、C801100 合成樹脂及塑膠製造業
 - 三、C802120 工業助劑製造業
 - 四、C802200 塗料、油漆、染料及顏料製造業
 - 五、C805050 工業用塑膠製品製造業
 - 六、C805070 強化塑膠製品製造業
 - 七、C801990 其他化學材料製造業

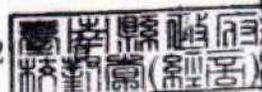
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縣長 蘇煥智



中華民國 九 月 三 日

第 1 頁 共 2



營業項目 (續)

八、C802990 其他化學製品製造業

九、E901010 油漆工程業

十、E903010 防蝕、防銹工程業

十一、F401010 國際貿易業

第一廠：臺南縣西港鄉慶安村中山路521號

第五廠：臺南縣西港鄉慶安村中山路506號

寶立廠：臺南縣西港鄉慶安村中山路508、510號

(以下空白)



營利事業統一編號： 74229304

第 2 頁 共 2 頁

編號：九九-六五六四一二-〇〇

經濟部工廠登記證

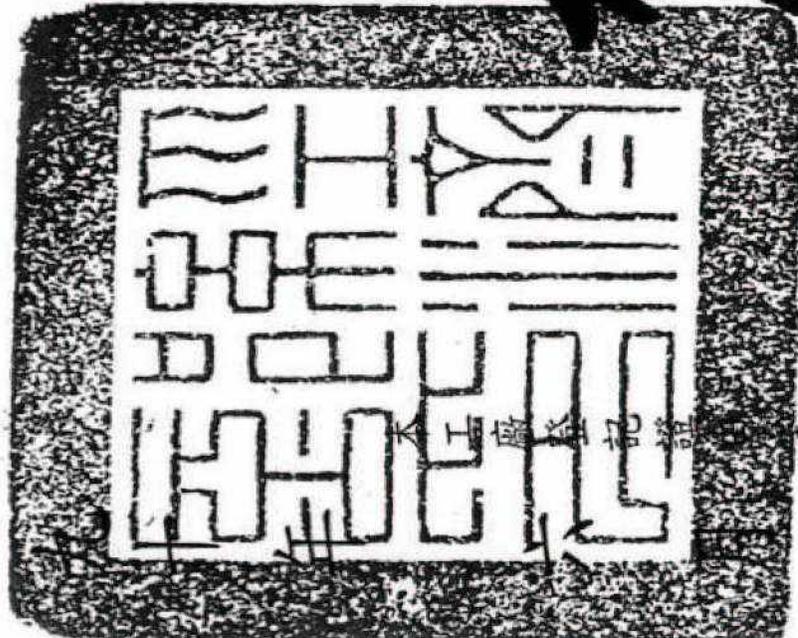
廠名：南寶樹脂化學工廠股份有限公司寶立廠

廠址：臺南縣西港鄉西港村中山路五〇八、五一〇號

產業類別：化學材料製造業
〈以下空白〉



部長 林信義



二十日

中華民國



2008 0895

0827

證書 TW08/00185

下述組織

南寶樹脂化學工廠(股)公司

723 台南市西港區中山路 519 號

的管理系統已經過審核，並被證明符合下述要求

ISO 9001:2015

所涵蓋的活動範圍

聚氨基甲酸酯樹脂，氯丁橡膠，接枝氯丁橡膠，硬化劑，表面處理劑，壓克力樹脂，多元醇樹脂，液體塗料，粉體塗料，水性樹脂，化學施套，熱熔膠，防水材料與耐燃塗料，食品罐與飲料罐包裝塗料之設計與製造

此證書的有效期自 2023 年 01 月 16 日 至 2026 年 01 月 16 日 且其有效性應繫於持續符合的定期稽核

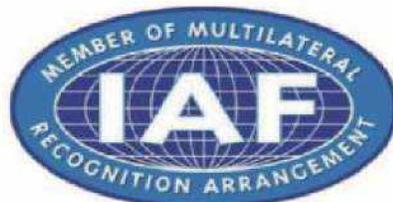
版次 7. 原始註冊日期 1996 年 01 月 16 日

其它場區/合法實體之驗證活動於後續頁上列出



簽署
Stephen Pao
Deputy Director

台灣檢驗科技股份有限公司
24803 新北市五股區新北產業園區五工路 136-1 號
t+886 (0)2 2299 3939 - www.sgs.com.tw



本文件為真實的電子版證書，僅供客戶用於其商業用途。此電子證書允許其列印版本並將被視為副本。本文件由本公司依據可取得之 [Terms and Conditions](#) | SGS. 中之 SGS 驗證服務通用條款頒發，敬請注意其中亦已包含的責任範圍，賠償和司法管轄事項。本文件受版權保護，任何未經授權而對此文件的內容或外觀作出變更、偽造或篡改皆屬違法。



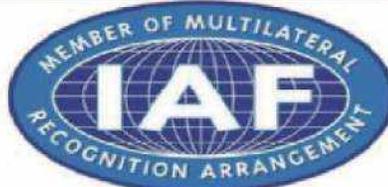
證書 TW08/00185, 續

南寶樹脂化學工廠(股)公司

SGS

ISO 9001:2015

版次 7
場區
南寶樹脂化學工廠(股)公司 723 台南市西港區中山路 519 號
聚氨基甲酸酯樹脂，氯丁橡膠，接枝氯丁橡膠，硬化劑，表面處理劑，壓克力樹脂，多元醇樹脂，液體塗料，粉體塗料，水性樹脂，化學施套，熱熔膠，防水材料與耐燃塗料，食品罐與飲料罐包裝塗料之設計與製造
南寶樹脂化學工廠(股)公司總廠 723 台南市西港區中山路 519 號
支持驗證範圍的研發及行政管理
南寶樹脂化學工廠(股)公司第一廠 723 台南市西港區慶安里中山路 521 號
聚氨基甲酸酯樹脂，氯丁橡膠，接枝氯丁橡膠，硬化劑及表面處理劑的生產
南寶樹脂化學工廠(股)公司寶立廠 723 台南市西港區西港里中山路 508, 510 號
水性樹脂，壓克力樹脂，化學施套及熱熔膠的生產
南寶樹脂化學工廠(股)公司第五廠 723 台南市西港區西港里中山路 506 號
多元醇樹脂，液體塗料，粉體塗料，防水材料與耐燃塗料，食品罐與飲料罐包裝塗料的生產



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Certificate TW02/00184 / 證書 TW02/00184

The management system of / 下述組織

NAN PAO RESINS CHEMICAL CO., LTD. 南寶樹脂化學工廠股份有限公司

No. 519, Zhongshan Rd., Xigang Dist., Tainan City 723023, Taiwan
723023 臺南市西港區中山路 519 號

has been assessed and certified as meeting the requirements of
的管理系統已經過審核，並被證明符合下述要求
ISO 14001:2015

For the following activities / 所涵蓋的活動範圍
The Scope of Registration appears on page 2 of this certificate
註冊範圍顯示在本證書的第二頁

This certificate is valid from 14 December 2023 until 14 December 2026 and remains valid subject to satisfactory surveillance audits.

此證書的有效期自 2023 年 12 月 14 日至 2026 年 12 月 14 日且其有效性應繫於持續符合的定期稽核

Issue 8. Certified since 14 April 1999

版次 8. 原始註冊日期 1999 年 04 月 14 日

Certified activities performed by additional sites are listed on subsequent pages.
其它場區/合法實體之驗證活動於後續頁上列出

Jonathan M. Hall

Authorised by / 簽署

Jonathan Hall

Global Head - Certification Services

SGS United Kingdom Ltd

Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN, UK

t+44 (0)151 350-6666 - www.sgs.com



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Certificate TW02/00184, continued / 證書 TW02/00184, 續

NAN PAO RESINS CHEMICAL CO., LTD. 南寶樹脂化學工廠股份有限公司

SGS

ISO 14001:2015

1. Research and develop of green and environmentally friendly adhesives and surface treatment agents for shoes and various shoe materials; green and sustainable hot melt adhesives and reactive hot melt adhesives for non-woven fabrics; textile bonding, woodworking bonding and automotive bonding; optical protection and bonding adhesives; water-based resins for green and environmentally friendly artificial leather; adhesives for household, construction and DIY industries; adhesives for soft packaging and multilayer films; various high-performance powder coatings, weather-resistant, high-performance liquid coatings and environmental water-based wood coatings.

2. Manufacturing of polyurethane resin (including solvent-based PU and water-based PU), curing agents, surface treatment agents, solvent-based acrylic resin, moisture-curing polyurethane resin (PUR), chloroprene rubber adhesive (liquid adhesive), solvent-based acrylic pressure-sensitive adhesive, polyvinyl acetate emulsion, ethylene-vinyl acetate emulsion, hot melt adhesive, water-based acrylic resin, moisture-curing polyurethane hot melt adhesive (PUR), magnetic ring products, chloroprene rubber (neoprene), polyol resin, liquid coatings (both solvent-based and water-based), powder coatings, hot melt adhesive, waterproof materials, and fire-resistant coatings, metal can liner coatings, halogen free & UL94V-0 fire retardant resistant epoxy based composite materials and plates (carbon fibre).

1. 研究與開發綠色環保鞋用膠水與各種鞋材的表面處理劑、綠色環保熱熔膠與反應型熱熔膠不織布、紡織貼合、木工貼合以及汽車貼合等產業應用、光學用保護膠與貼合膠、綠色環保人造皮革用水性樹脂、民生工業、建築用與 DIY 等行業用接著劑開發、軟包(多層膜)用接著劑、各種高性能粉體塗料、耐候、高性能液體塗料與環保水性木器漆

2. 聚氨基甲酸酯樹脂(含油性 PU 及水性 PU)、硬化劑、表面處理劑、油性壓克力樹脂、濕氣硬化型聚氨酯樹脂(PUR)、接枝氯丁橡膠接著劑(藥水糊)、油性壓克力感壓膠、聚醋酸乙烯酯乳液、乙酸醋酸乙烯乳液、熱熔膠、水性壓克力樹脂、磁環產品、氯丁橡膠(黃膠)、多元醇樹脂、液體塗料(油性及水性)、粉體塗料、熱熔膠、防水材料與耐燃塗料、金屬罐頭包裝塗料、無鹵暨 UL94V0 難燃級環氧樹脂基複合材料及碳纖維板材製造



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Certificate TW02/00184, continued / 證書 TW02/00184, 續

NAN PAO RESINS CHEMICAL CO., LTD.

南寶樹脂化學工廠股份有限公司

ISO 14001:2015

Issue / 版次 8
Sites / 場區
<p>NAN PAO RESINS CHEMICAL CO., LTD. (HEADQUARTERS) 南寶樹脂化學工廠股份有限公司(總部) No. 519, Zhongshan Rd., Xigang Dist., Tainan City 723023, Taiwan 723023 臺南市西港區中山路 519 號</p> <p>Research and develop of green and environmentally friendly adhesives and surface treatment agents for shoes and various shoe materials; green and sustainable hot melt adhesives and reactive hot melt adhesives for non-woven fabrics; textile bonding, woodworking bonding and automotive bonding; optical protection and bonding adhesives; water-based resins for green and environmentally friendly artificial leather; adhesives for household, construction and DIY industries; adhesives for soft packaging and multilayer films; various high-performance powder coatings, weather-resistant, high-performance liquid coatings and environmental water-based wood coatings.</p> <p>研究與開發綠色環保鞋用膠水與各種鞋材的表面處理劑、綠色環保熱熔膠與反應型熱熔膠不織布、紡織貼合、木工貼合以及汽車貼合等產業應用、光學用保護膠與貼合膠、綠色環保人造皮革用水性樹脂、民生工業、建築用與 DIY 等行業用接著劑開發、軟包(多層膜)用接著劑、各種高性能粉體塗料、耐候、高性能液體塗料與環保水性木器漆</p>
<p>NAN PAO RESINS CHEMICAL CO., LTD. FIRST FACTORY 南寶樹脂化學工廠股份有限公司第一廠 No. 521, Zhongshan Rd., Xigang Dist., Tainan City 723023, Taiwan 723023 臺南市西港區中山路 521 號</p> <p>Manufacturing of polyurethane resin (including solvent-based PU and water-based PU), curing agents, surface treatment agents, solvent-based acrylic resin, moisture-curing polyurethane resin (PUR), chloroprene rubber adhesive (liquid adhesive), solvent-based acrylic pressure-sensitive adhesive.</p> <p>聚氨基甲酸酯樹脂(含油性 PU 及水性 PU)、硬化劑、表面處理劑、油性壓克力樹脂、濕氣硬化型聚氨酯樹脂 (PUR)、接枝氯丁橡膠接著劑(藥水糊)、油性壓克力感壓膠製造</p>



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Certificate TW02/00184, continued / 證書 TW02/00184, 續

NAN PAO RESINS CHEMICAL CO., LTD.
南寶樹脂化學工廠股份有限公司

ISO 14001:2015

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NAN PAO RESINS CHEMICAL CO., LTD. POLY FACTORY

南寶樹脂化學工廠股份有限公司寶立廠

No. 508, 510, Zhongshan Rd., Xigang Dist., Tainan City 723023, Taiwan

723023 臺南市西港區中山路 508、510 號

Manufacturing of polyvinyl acetate emulsion, ethylene-vinyl acetate emulsion, hot melt adhesive, water-based acrylic resin, moisture-curing polyurethane hot melt adhesive (PUR), magnetic ring products.

聚醋酸乙烯酯乳液、乙烯-醋酸乙烯酯乳液、熱熔膠、水性壓克力樹脂、濕氣硬化型聚氨酯熱熔膠(PUR)、磁環產品製造

NAN PAO RESINS CHEMICAL CO., LTD. FIFTH FACTORY

南寶樹脂化學工廠股份有限公司第五廠

No. 506, Zhongshan Rd., Xigang Dist., Tainan City 723023, Taiwan

723023 臺南市西港區中山路 506 號

Manufacturing of chloroprene rubber (neoprene), polyol resin, liquid coatings (both solvent-based and water-based), powder coatings, hot melt adhesive, waterproof materials, and fire-resistant coatings, metal can liner coatings.

氯丁橡膠(黃膠)、多元醇樹脂、液體塗料(油性及水性)、粉體塗料、熱熔膠、防水材料與耐燃塗料、金屬罐頭包裝塗料製造

NAN PAO RESINS CHEMICAL CO., LTD. GUIREN FACTORY

南寶樹脂化學工廠股份有限公司歸仁廠

1F, B1 Building, No. 48, Sec. 1, Zhongshan Rd. Guiren Dist., Tainan City 711002, Taiwan

711002 臺南市歸仁區中山路一段 48 號 B1 棟 1 樓

Manufacturing of halogen free & UL94V-0 fire retardant resistant epoxy based composite materials and plates (carbon fibre).

無鹵暨 UL94V0 難燃級環氧樹脂基複合材料及碳纖維板材料製造



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Certificate TW23/00000028 / 證書 TW23/00000028

The management system of / 下述組織

NAN PAO RESINS CHEMICAL CO., LTD.

First Factory

南寶樹脂化學工廠股份有限公司 第一廠

NO.521 Zhongshan Rd., Qing'an Vil., Xigang Dist., Tainan City 723, Taiwan
723 台南市西港區慶安里中山路 521 號

has been assessed and certified as meeting the requirements of
的管理系統已經過審核，並被證明符合下述要求

ISO 46001:2019

For the following activities / 所涵蓋的活動範圍

DESIGN AND MANUFACTURE OF PU RESIN, CHLORINATED RUBBER, GRAFTED CHLORINATED RUBBER, HARDENER, SURFACE TREATING AGENT, ACRYLIC RESIN, POLYOL RESIN, LIQUID PAINT, POWDER PAINT, WATER BASE RESIN, CHEMICAL SHEET, HOT MELT ADHESIVE, WATER-PROOFING MATERIAL, FIRE RETARDANT PAINT, PACKAGING COATINGS FOR FOOD AND BEVERAGE CANS.

聚氨基甲酸酯樹脂，氯丁橡膠，接枝氯丁橡膠，硬化劑，表面處理劑，壓克力樹脂，多元醇樹脂，液體塗料，粉體塗料，水性樹脂，化學施套，熱熔膠，防水材料與耐燃塗料，食品罐與飲料罐包裝塗料之設計與製造。

This certificate is valid from 12 January 2023 until 12 January 2026 and remains valid subject to satisfactory surveillance audits.

Issue 1. Certified since 12 January 2023

Certified activities performed by additional sites are listed on subsequent pages.

此證書的有效期自 2023 年 01 月 12 日 至 2026 年 01 月 12 日 且其有效性應繫於持續符合的定期稽核

版次 1 原始註冊日期 2023 年 01 月 12 日

其它場區/合法實體之驗證活動於後續頁上列出

Authorised by / 簽署
Stephen Pao
Deputy Director

SGS Taiwan Ltd.
No. 136-1, Wu Kung Road, New Taipei Industrial Park, Wu Ku District, New Taipei City 24803, Taiwan
t+886 (0)2 2299 3939 - www.sgs.com.tw



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Certificate TW23/00000028, continued / 證書 TW23/00000028, 續

NAN PAO RESINS CHEMICAL CO., LTD.

First Factory

南寶樹脂化學工廠股份有限公司 第一廠

ISO 46001:2019

Issue / 版次 1
Sites / 場區
NAN PAO RESINS CHEMICAL CO., LTD. First Factory 南寶樹脂化學工廠股份有限公司 第一廠 NO.521 Zhongshan Rd., Qing'an Vil., Xigang Dist., Tainan City 723, Taiwan 723 台南市西港區慶安里中山路 521 號 DESIGN AND MANUFACTURE OF PU RESIN, CHLORINATED RUBBER, GRAFTED CHLORINATED RUBBER, HARDENER, SURFACE TREATING AGENT, ACRYLIC RESIN, POLYOL RESIN, LIQUID PAINT, POWDER PAINT, WATER BASE RESIN, CHEMICAL SHEET, HOT MELT ADHESIVE, WATER-PROOFING MATERIAL, FIRE RETARDANT PAINT, PACKAGING COATINGS FOR FOOD AND BEVERAGE CANS. 聚氨基甲酸酯樹脂, 氯丁橡膠, 接枝氯丁橡膠, 硬化劑, 表面處理劑, 壓克力樹脂, 多元醇樹脂, 液體塗料, 粉體塗料, 水性樹脂, 化學施套, 熱熔膠, 防水材料與耐燃塗料, 食品罐與飲料罐包裝塗料之設計與製造.
NAN PAO RESINS CHEMICAL CO., LTD. Fifth Factory 南寶樹脂化學工廠股份有限公司 第五廠 NO. 506 Zhongshan Rd., Xigang Vil., Xigang Dist., Tainan City 723, Taiwan 723 台南市西港區西港里中山路 506 號 DESIGN AND MANUFACTURE OF PU RESIN, CHLORINATED RUBBER, GRAFTED CHLORINATED RUBBER, HARDENER, SURFACE TREATING AGENT, ACRYLIC RESIN, POLYOL RESIN, LIQUID PAINT, POWDER PAINT, WATER BASE RESIN, CHEMICAL SHEET, HOT MELT ADHESIVE, WATER-PROOFING MATERIAL, FIRE RETARDANT PAINT, PACKAGING COATINGS FOR FOOD AND BEVERAGE CANS. 聚氨基甲酸酯樹脂, 氯丁橡膠, 接枝氯丁橡膠, 硬化劑, 表面處理劑, 壓克力樹脂, 多元醇樹脂, 液體塗料, 粉體塗料, 水性樹脂, 化學施套, 熱熔膠, 防水材料與耐燃塗料, 食品罐與飲料罐包裝塗料之設計與製造.



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Certificate TW23/00000028, continued / 證書 TW23/00000028, 續

NAN PAO RESINS CHEMICAL CO., LTD.

First Factory

南寶樹脂化學工廠股份有限公司 第一廠

ISO 46001:2019

SGS

NAN PAO RESINS CHEMICAL CO., LTD. PaoLi Factory

南寶樹脂化學工廠股份有限公司 寶立廠

NO. 508 & 510 Zhongshan Rd., Xigang Vil., Xigang Dist., Tainan City 723, Taiwan

723 台南市西港區西港里中山路 508 & 510 號

DESIGN AND MANUFACTURE OF PU RESIN, CHLORINATED RUBBER, GRAFTED CHLORINATED RUBBER, HARDENER, SURFACE TREATING AGENT, ACRYLIC RESIN, POLYOL RESIN, LIQUID PAINT, POWDER PAINT, WATER BASE RESIN, CHEMICAL SHEET, HOT MELT ADHESIVE, WATER-PROOFING MATERIAL, FIRE RETARDANT PAINT, PACKAGING COATINGS FOR FOOD AND BEVERAGE CANS.

聚氨基甲酸酯樹脂，氯丁橡膠，接枝氯丁橡膠，硬化劑，表面處理劑，壓克力樹脂，多元醇樹脂，液體塗料，粉體塗料，水性樹脂，化學施套，熱熔膠，防水材料與耐燃塗料，食品罐與飲料罐包裝塗料之設計與製造。



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材料暨工程實驗室-高雄



Testing Laboratory
0526

試驗報告



報告編號：KV-21-09046

頁數：1 OF 3

報告日期：111年05月27日

南寶樹脂化學工廠股份有限公司

產品名稱: 塗特佳 PVDF 氟碳粉體塗料
送驗廠商: 南寶樹脂化學工廠股份有限公司
收件日期: 110年10月07日
試驗日期: 110年10月07日~111年05月27日
備註: 1.以上資料由顧客提供(收件及試驗日期除外)
2.除非另有說明,此報告結果僅對測試之樣品負責
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3.下述報告內容標示#處由顧客提供

試驗結果:

試驗項目	試驗方法	試驗結果	#AAMA 2605-20 規範要求值
乾膜厚度(μm)	ASTM D7091-20	69.3	30 以上
光澤度(60°)		45	規格值±5
密著性(2 mm)	乾膜	5B (無任何剝離現象)	4B 以上
	濕膜	5B (無任何剝離現象)	
	沸騰水	5B (無任何剝離現象)	
耐衝擊性(變型 3 ± 0.3 mm) (5/8", 52.9 in-lb)		漆面無剝落現象	漆面無剝落現象
耐磨耗 (L)	AAMA 2605-20 ASTM D968-17	可承受 80L 的沙子	可承受 80L 的沙子
耐化學性			
a.耐鹽酸(15 mins)	AAMA 2605-20	表面無水泡的產生以及明顯的外觀變化	不得有水泡的產生以及明顯的外觀變化
b.耐灰泥 (38 °C, 100 % R.H., 24 hr)		灰泥塊能輕易取下,任何殘留物能輕易用濕布拭去,水泥痕跡能輕易用 10 % 氫氟酸拭去且塗膜無剝離及外觀變化	灰泥塊能輕易取下,任何殘留物能輕易用濕布拭去,水泥痕跡能輕易用 10 % 氫氟酸拭去且塗膜無剝離及外觀變化
c.耐硝酸(30 mins)		外觀無明顯變化且 ΔE* = 0.10	外觀無明顯變化且顏色變化不超過 5 ΔE*
d.耐清潔劑 (3 %, 38 °C, 72 hr)		表面無水泡的產生及明顯的外觀變化、密著性無剝離現象	不得有水泡的產生及明顯的外觀變化、密著性無剝離現象
e.耐玻璃清潔劑 (3 %, 24 h)		表面無水泡的產生及明顯的外觀變化、密著性 100%無剝離	表面無水泡的產生及明顯的外觀變化、密著性 100%無剝離

---- 1 ----

郭季如

報告簽署人

本報告若有提供規範值,該規範值僅供參考,合格之判定以委託單位實際要求為準

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材料暨工程實驗室-高雄



試驗報告



報告編號：KV-21-09046

頁數：2 OF 3

報告日期：111年05月27日

試驗結果：

試驗項目	試驗方法	試驗結果	#客戶要求值
耐濕性 (100 °F, 100 % R.H, 5000 hr)	AAMA 2605-20 ASTM D2247-15 ASTM D714-02	起泡數量：無起泡 起泡尺寸：無起泡	起泡數量不超過 Few 起泡尺寸不超過 8
鹽水噴霧試驗(5000 hr)	AAMA 2605-11 ASTM B117-19	切割線剝落等級：10 起泡等級：無起泡	切割線剝落等級 7 以上 起泡等級 8 以上
乾膜硬度(破損法)	ASTM D3363-20	5H	硬度 F 以上無刮傷
耐候性(5000 h)	ASTM G155-13 ASTM D4214-07 ASTM D2244-16 ASTM D523-14 ASTM B244-09	1. 無粉化現象 2. ΔE = 0.40 3. 光澤保持率: 64.6% 4. 膜厚損失率: 3.3%	1. 粉化等級 8 以上 2. 5ΔE 以下 3. 光澤保持率: 50% 以上 4. 膜厚損失率: 10% 以下

試驗項目	試驗方法	試驗結果
耐汙染性(18 hr)		
0.01% 食用色素(紅色 6 號)	CNS10757(1995)	無變化(無顏色、光澤變化及無膨脹)
紅茶		無變化(無顏色、光澤變化及無膨脹)
咖啡		無變化(無顏色、光澤變化及無膨脹)
醬油		無變化(無顏色、光澤變化及無膨脹)
食用植物油		無變化(無顏色、光澤變化及無膨脹)
硬化油		無變化(無顏色、光澤變化及無膨脹)
番茄醬		無變化(無顏色、光澤變化及無膨脹)
鞋油		無變化(無顏色、光澤變化及無膨脹)
蠟筆		無變化(無顏色、光澤變化及無膨脹)
口紅		無變化(無顏色、光澤變化及無膨脹)
標記筆		無變化(無顏色、光澤變化及無膨脹)
辣醬油		無變化(無顏色、光澤變化及無膨脹)

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材料暨工程實驗室-高雄



Testing Laboratory
0526

試驗報告



報告編號：KV-21-09046

頁數：3 OF 3

報告日期：111年05月27日

註：1.試驗試片由委託單位製備提供。

2.鹽水噴霧試驗條件：

鹽液溶液： (5 ± 1) W/V%。

試驗室溫度： (35 ± 2) °C。

飽和空氣溫度： $(46 \sim 49)$ °C。

噴霧量(mL/hr/80cm²)： $(1.0 \sim 2.0)$ 。

收集鹽霧 pH 值： $(6.5 \sim 7.2)$ 。

試片擺放角度： $(15 \sim 30)$ °。

3.耐候性試驗條件：

使用光源：氙弧燈

照射強度： 0.35 (W/m²·nm) at 340 nm

黑炭板溫度： (63 ± 3) °C

測試週期：102 分鐘照光+18 分鐘照光及噴水

4.本試驗報告光澤保持率、膜厚減損率試驗非 TAF 認可項目，其餘則是

5.本試驗報告之試驗地點同實驗室地址。

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Material and Engineering Laboratory-Kaohsiung

Test Report



Report No. : KV-21-09046A
Page No. : 1 OF 4
Date of Report : May 27,2022

Nan Pao Resins Chemical Co., Ltd

Product Name Tuterga PVDF Fluorocarbon Powder Coating

Product Submitted By Nan Pao Resins Chemical Co., Ltd

Date of Sample Received Oct. 07, 2021

Date of Testing Oct. 07, 2021~May 27, 2022

Remark
1.The information mentioned in the above section is provided by Client
(Exclude Date of Sample Received and Date of Testing)
2.The following report content marks # is provided by Client.

TEST RESULTS :

Test Item	Test Method	Test Result	#AAMA 2605-20 Requirements	
Dry Film Thickness(μm)	ASTM D7091-20	69.3	30 min.	
Specular Gloss(60°)	AAMA 2605-20	45	Within ±5 units of the manufacturer's specification	
Film Adhesion (2 mm)		Dry Adhesion	5B (No removal and blistering)	There shall be achieved level 4B
		Wet Adhesion	5B (No removal and blistering)	
		Boiling Water Adhesion	5B (No removal and blistering)	
Impact Resistance (deform 3±0.3 mm) (5/8", 52.9 in-lb)		No removal of film from substrate	No removal of film from substrate	
Abrasion Resistance (L)	AAMA 2605-20 ASTM D968-17	The coating can withstand a volume of 80 L of sand.	The coating shall withstand a volume of 80 L of sand.	

----- 1 -----

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The conformity judgment is at the Applicant's final verdict.

Signed for and on behalf of
SGS Taiwan Ltd.

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Material and Engineering Laboratory-Kaohsiung

Test Report



Report No. : KV-21-09046A
Page No. : 2 OF 4
Date of Report : May 27,2022

TEST RESULTS :

Test Item	Test Method	Test Result	#AAMA 2605-20 Requirements
Chemical Resistance			
a. Muriatic Acid Resistance (15 min.)	AAMA 2605-20	No blistering and no visual change in appearance when examined by the unaided eye.	No blistering and no visual change in appearance when examined by the unaided eye.
b. Mortar Resistance (38°C, 100 % R.H., 24 h)		Mortar shall dislodge easily from the painted, and any residue shall be removable with a damp cloth. Any lime residue should be easily removed with the 10% muriatic acid solution. There shall be no loss of film adhesion or visual change in appearance when examined by the unaided eye.	Mortar shall dislodge easily from the painted, and any residue shall be removable with a damp cloth. Any lime residue should be easily removed with the 10% muriatic acid solution. There shall be no loss of film adhesion or visual change in appearance when examined by the unaided eye.
c. Nitric Resistance (30 mins)		No visual change in appearance and $\Delta E^* = 0.10$	There shall be not more than 5 ΔE^* units of color change, when comparing measurements on the acid-exposed painted surface and the unexposed surface.
d. Detergent Resistance (3 %, 38°C, 72 h)		No loss adhesion of the film to the metal, no blistering and no signification visual change in appearance when examined by the unaided eye	No loss adhesion of the film to the metal, no blistering and no signification visual change in appearance when examined by the unaided eye
e. Window Cleaner Resistance (3 %, 24 h)		No blistering or noticeable change in appearance when by the unaided eye and no removal of film under the tape within or outside of the cross-hatched area.	There shall be no blistering or noticeable change in appearance when by the unaided eye and no removal of film under the tape within or outside of the cross-hatched area.
Humidity Resistance (38°C, 100 % R.H, 5000 hr)	AAMA 2605-20 ASTM D2247-15 ASTM D714-02	Blisters number : No blistering Blisters size : No blistering	No formation blisters to an extent greater than "Few" blisters Size NO.8

----- 2 -----

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Material and Engineering Laboratory-Kaohsiung

Test Report



Report No. : KV-21-09046A
Page No. : 3 OF 4
Date of Report : May 27,2022

TEST RESULTS :

Test Item	Test Method	Test Result	#Specified value by Client
Salt Spray Resistance (5000 hr)	AAMA 2605-11 ASTM B117-19	Rating of failure at scribe : 10 Rating of blisters : No blistering	Minimum rating of seven on scribe and minimum blisters rating of eight
Dry Film Hardness- Gouge Hardness	ASTM D3363-20	5H	No rupture for grade F min.
Weather Exposure(5000 h)	ASTM G155-13 ASTM D4214-07 ASTM D2244-16 ASTM D523-14 ASTM B244-09	1. chalking resistance 8 2. ΔE= 0.40 3. gloss retention: 64.6 % 4. film thickness loss:3.3 %	1. chalking resistance 8 min. 2. 5ΔE max. 3. gloss retention: 50 % min. 4. film thickness loss: 10 % max.

Test Item	Test Method	Test Result
Stain Resistance(18 h)		
0.01% Coloring Matter for Food(Red No. 6)	CNS10757(1995)	No change (No change of colour and gloss, and blistering)
Black Tea		No change (No change of colour and gloss, and blistering)
Coffee		No change (No change of colour and gloss, and blistering)
Soy Sauce		No change (No change of colour and gloss, and blistering)
Vegitable Oils		No change (No change of colour and gloss, and blistering)
Margaring		No change (No change of colour and gloss, and blistering)
Tomato Catsup		No change (No change of colour and gloss, and blistering)
Shoe Polish		No change (No change of colour and gloss, and blistering)
Crayon		No change (No change of colour and gloss, and blistering)
Rouge		No change (No change of colour and gloss, and blistering)
Marking Pen		No change (No change of colour and gloss, and blistering)
Sauce		No change (No change of colour and gloss, and blistering)

----- 3 -----

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Material and Engineering Laboratory-Kaohsiung

Test Report



Report No. : KV-21-09046A
Page No. : 4 OF 4
Date of Report : May 27,2022

- Note :
- The testing specimen is made and provided by client.
 - Salt spray test condition :
 - Salt Solution Concentration : (5 ± 1) W/V%.
 - Temperature in the Salt Spray Chamber : (35 ± 2) °C.
 - Saturated air temperature : (46 ~ 49) °C.
 - Volume of salt solution collected (ml/hr/80cm²) : (1.0 ~ 2.0).
 - pH of Collected Solution : (6.5 ~ 7.2).
 - The Tested Surface is Supported From the Vertical : (15 ~ 30) °.
 - Weather exposure test condition :
 - Lamp : Xenon-arc
 - Irradiance : 0.35 W/m² at 340 nm
 - Black panel temperature : (63 ± 3) °C
 - Exposing duration : 120 minutes irradiation, 18 minutes irradiation and spray.
 - Gloss retention, film thickness loss tests are not accredited by TAF
 - Test location is the same as the laboratory address.
 - This Test Report is an additional original report of KV-21-09046. Issued date : May 27, 2022

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2017



測試報告

報告編號: HKC24500074

報告日期: 2024/05/30

頁數: 1 of 3

欣聖國際開發有限公司
臺南市官田區二鎮里二鎮56之26號

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=====
收件日 : 2024/05/17
測試期間 : 2024/05/17 to 2024/05/30

測試結果 : 請見下一頁。

張伯睿

報告簽署人/張伯睿 博士/部經理
化學實驗室-高雄



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測試報告

報告編號: HKC24500074

報告日期: 2024/05/30

頁數: 1 of 3

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臺南市官田區二鎮里二鎮56之26號

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送樣廠商 : 欣聖國際開發有限公司
樣品名稱 : 氟碳粉體塗料
樣品型號 : 氟藝彩飾
生產或供應廠商 : 欣聖國際開發有限公司、南寶樹脂化學工廠股份有限公司、華邦國際工業股份有限公司、耀譽科技工業有限公司

=====
收件日 : 2024/05/17
測試期間 : 2024/05/17 to 2024/05/30

測試結果 : 請見下一頁。

張伯睿

報告簽署人/張伯睿 博士/部經理
化學實驗室-高雄



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測試報告

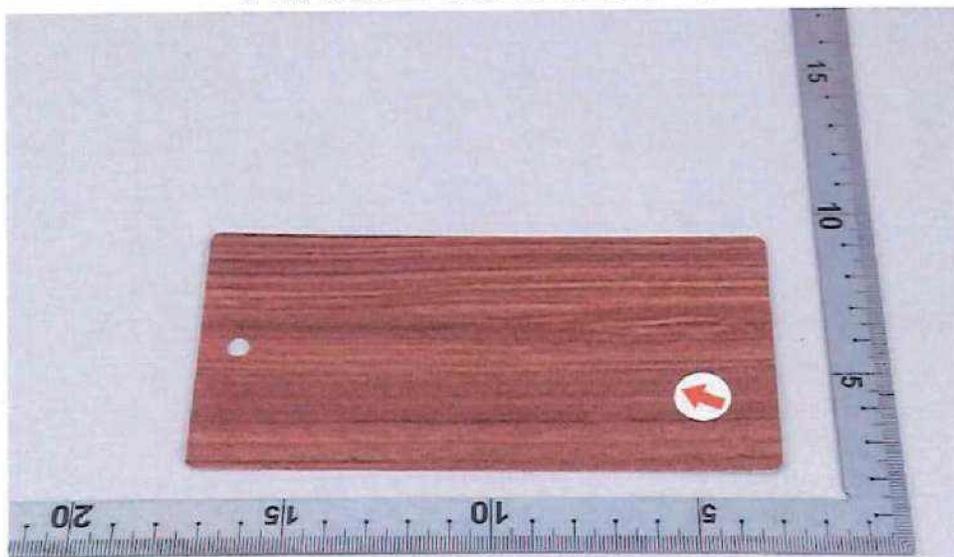
欣聖國際開發有限公司
臺南市官田區二鎮里二鎮56之26號

報告編號: HKC24500074

報告日期: 2024/05/30 頁數: 3 of 3

* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。 *

HKC24500074



** 報告結尾 **

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No. 61, Kai-Fa Road, Nanzih Dist., Kaohsiung, Taiwan

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Test Report

No.: HKC24500074M01

DATE: 2024/05/30

PAGE: 1 of 3

XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.
NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN

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

Sample Submitted By : XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.
Sample Description : FLUORINE ARTS POLYCHROME
Style/Item No. : FLUOROCARBON POWDER COATING
Manufacturer/Vendor : XINSHENG LINTERNATIONAL DEVELOPMENT CO.LTD , YAO
REPUTATION TECHNOLOGY INDUSTRY CO.LTD , NAN PAO
RESINS CHEMICAL CO.LTD , WINBAND INTERNATIONAL
INDUSTRIAL CO.LTD

Sample Receiving Date : 2024/05/17
Testing Period : 2024/05/17 to 2024/05/30

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

Ray Chang

Ray Chang, Ph.D. / Department Manager
Signed for and on behalf of
SGS Taiwan Ltd.
Chemical Laboratory-Kaohsiung



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Test Report

No.: HKC24500074M01

DATE: 2024/05/30

PAGE: 2 of 3

XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.
NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN

Test Part Description

No.1 : BROWN PAINT

Test Result(s)

Test Item(s)	Method	Unit	RL	Result
				No.1
Soluble Mercury (Hg) (CAS No.7439-97-6)	With reference to CNS 4797-2:2022, analysis was performed by ICP-OES.	mg/kg	2	n.d.
Soluble Lead (Pb) (CAS No.7439-92-1)		mg/kg	1	n.d.
Soluble Antimony (Sb) (CAS No.7440-36-0)		mg/kg	2	n.d.
Soluble Chromium (Cr) (CAS No.7440-47-3)		mg/kg	1	n.d.
Soluble Cadmium (Cd) (CAS No.7440-43-9)		mg/kg	1	n.d.
Soluble Barium (Ba) (CAS No.7440-39-3)		mg/kg	1	n.d.
Soluble Arsenic (As) (CAS No.7440-38-2)		mg/kg	1	n.d.
Soluble Selenium (Se) (CAS No.7782-49-2)		mg/kg	2	n.d.

Note:

1. mg/kg = ppm ; 0.1% = 1000 ppm
2. RL = Reporting Limit
3. n.d. = Not Detected = Less than RL
4. The report is invalid if it is partly reproduced or used.
5. This is the additional test report of HKC24500074. The additional test report is issued on 2024/05/30.

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Test Report

No.: HKC24500074M01

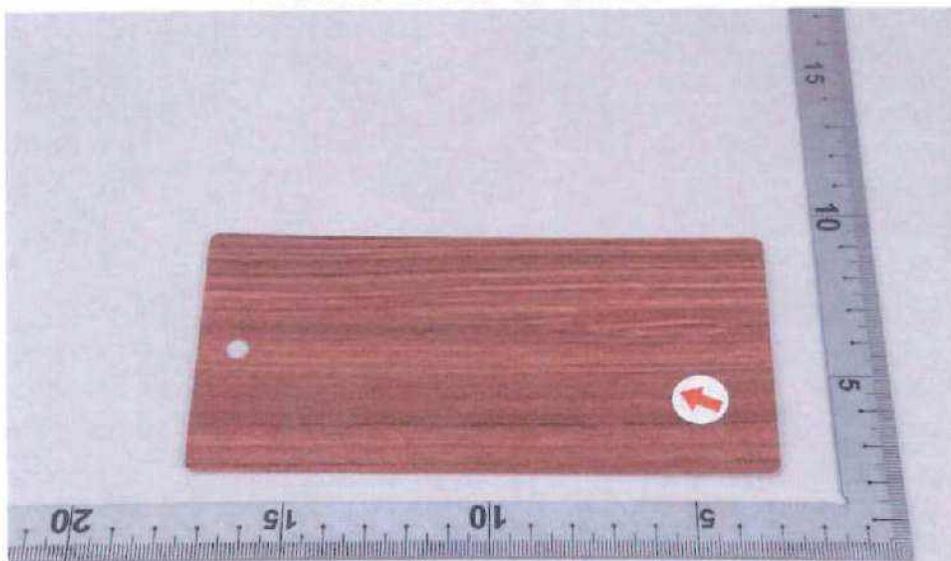
DATE: 2024/05/30

PAGE: 3 of 3

XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.
NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN

* The tested sample / part is marked by an arrow if it's shown on the photo. *

HKC24500074



**** End of Report ****

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內政部建築研究所防火實驗中心

地址:711臺南市歸仁區六甲里中正南路1段2502號
電話:(06)2392755, 傳真:(06)2392701



建築材料燃燒熱釋放率 試驗報告

試驗日期:102年8月28日

報告書編號:CNS-14705-10252

試體名稱:塗特佳PVDF氟碳粉體塗料

委託編號:F1210265

委託單位:晶彩典色彩企業有限公司

1. 上項試體經本實驗中心試驗,報告含封面共20頁。
2. 使用本報告時須整份使用,分離使用無效,不得任意摘錄。
3. 本試驗報告僅對委託試驗試體負責。
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6. 委託單位僅得全文引用下列文字:「所標示之性能是由內政部建築研究所防火實驗中心,依據 CNS 14705 (2011) 建築材料燃燒熱釋放率試驗法-圓錐量熱儀法試驗所得」。不得分離其中「內政部建築研究所防火實驗中心」稱謂,在任何廣告、傳單或產品宣傳文件上使用。
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主任研究員 蔡銘儒
兼主任

防火實驗中心主管

中華民國102年9月10日

內政部建築研究所防火實驗中心
711 臺南市歸仁區六甲里中正南路1段2502號

報告書編號: CNS-14705-10202
頁次: 第4頁, 共20頁



試體編號 F1210265-1			
項目	平均值	高峯值	高峯值發生時間(秒)
熱釋放率 (kW/m ²)	4.60	51.40	113
有效燃燒熱 (MJ/kg)	13.65	199.05	143
重量損失率 (g/s)	0.003	0.241	357
試體編號 F1210265-2			
項目	平均值	高峯值	高峯值發生時間(秒)
熱釋放率 (kW/m ²)	2.42	45.90	119
有效燃燒熱 (MJ/kg)	11.16	152.07	136
重量損失率 (g/s)	0.002	0.134	481
試體編號 F1210265-3			
項目	平均值	高峯值	高峯值發生時間(秒)
熱釋放率 (kW/m ²)	3.97	49.36	124
有效燃燒熱 (MJ/kg)	11.16	57.45	133
重量損失率 (g/s)	0.003	0.123	476
加熱試驗結果之平均值及高峯值	<p>3個試體在180秒內之平均熱釋放率相互比較</p> <p>1. 依據 CNS 14705 附錄 B.3 試體數量規定, 3個試體在 180 秒內之平均熱釋放率應相互比較, 若任一讀數偏離算術平均值 10% 以上, 且其總釋放量大於 7 MJ/m² 以上時, 則須加作 3 個試體, 並以全部 6 個試體之試驗結果判定耐燃性級別。但若有任一試體總熱釋放超過 8 MJ/m² 以上, 雖有任一試體偏離算數平均值 10% 以上, 則可不需加作 3 個試體。</p> <p>2. 送測試體總釋放量皆未大於 7 MJ/m², 因此不需加作 3 個試體。</p>		
判定	總熱釋放量, 為 8 MJ/m ² 以下	試體總熱釋放量皆未超過 8 MJ/m ² 。	
	最大熱釋放率無持續10秒以上超過 200 kW/m ²	最大熱釋放率無持續10秒以上超過 200 kW/m ² 。	
	無防火上有害之貫穿至背面之龜裂及孔穴	無產生防火上有害之貫穿至背面之龜裂及孔穴。	
	綜合判定	符合 CNS 14705 附錄 B.4 所規定之耐燃 2 級試驗。	
試驗操作人	專案助理 陳佳玲	報告簽署人	副研究員 李其忠



新加坡三昌實業有限公司

試驗報告

報告號碼: KV-07-07351X

頁數: 1 OF 1

日期: 96年 08月 22日

委託單位: 新加坡三昌實業有限公司 / 晶彩典色彩企業有限公司
 產品名稱: 鍍特佳 PVD 鍍膜塗料
 送驗單位: 新加坡三昌實業有限公司 / 晶彩典色彩企業有限公司
 收樣日期: 96年 08月 17日
 試驗日期: 96年 08月 18日 - 96年 08月 21日
 備註: 以上資料由送驗單位提供(試驗日期除外)

試驗結果:

試驗項目	試驗方法	試驗結果
PVD 含量(%)	參照 JIS K5658	91

註:PVD: 鍍特佳二類乙類。

—○○—

本報告係根據送驗單位提供之資料, 經本實驗室檢驗後, 依據相關標準及方法, 所出具之報告, 僅供參考之用。

林多翔
報告簽署人

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材料暨工程實驗室-高雄



Testing Laboratory
0526

試驗報告



報告編號：KV-24-03990

頁數：1 OF 3

報告發行日期：113年08月07日

欣聖國際開發有限公司

產品名稱： 氟碳粉體塗料
產品型號： 氟藝彩飾
產品顏色： 混彩多色
製造廠商： 欣聖國際開發有限公司/南寶樹脂化學工廠股份有限公司/
 華邦國際工業股份有限公司
供應廠商： 欣聖國際開發有限公司/耀譽科技工業有限公司
送驗廠商： 欣聖國際開發有限公司
收件日期： 113年04月23日
試驗日期： 113年04月23日~113年08月07日
備註： 1.以上資料(會驗廠商、試驗方法、試驗數量、收件日期及
 試驗日期除外)及下述報告內容標示#處係由顧客提供
 2.除非另有說明，此報告結果僅適用於收取之試驗件
 未經本公司事先書面同意，此報告不可部分複製

試驗結果：

試驗項目	試驗方法	試驗結果
耐酸性(30%硫酸, 23°C, 500 h)	CNS 10757 : 1995	酸浸漬試驗無異常(註2)
耐鹼性(30%氫氧化鈉, 23°C, 500 h)	JIS K5400 : 1990	無產生龜裂及脫離現象
耐洗刷性(30,000 次)	CNS 10757 : 1995	可耐 30,000 次數之洗淨試驗(註3)
耐冷熱反覆作用抵抗性 (23±2 °C 水中/18h→-20±2 °C/3h→ 50±3 °C/3h, 10 循環)	CNS 8082 : 2021	試樣表面無龜裂、剝離及膨脹，且無顯著變色及光澤降低
耐污染性	註4	無光澤變化現象，無產生顏色變化現象
鉛筆硬度	刮傷法	F
	破損法	9H
熱放射率	ASTM C1371-04a	0.90
日光反射指數(SRI)(12 W·m ⁻² ·K ⁻¹)	ASTM E1980-11	87
日光反射率(%)	ASTM C1549-16	71.1
膜厚(µm)	CNS 9007 : 1995 渦電流式膜厚計法	145
防黴性	ASTM G21-15	等級0 (註7)

----- 1 -----

報告簽署人

本報告若有提供規範值，該規範值僅供參考，合格之判定以委託單位實際要求為準

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TWE1031563



材料暨工程實驗室-高雄



Testing Laboratory
0526

試驗報告



報告編號：KV-24-03990

頁數：2 OF 3

報告發行日期：113年08月07日

抗菌性試驗：

試驗方法：JIS Z2801：2010 / AMD 1：2012 抗菌加工製品-抗菌性試驗方法-抗菌效果

作用時間：24 小時

菌株名稱	無加工試料 24 小時後活菌數之平均值(CFU/cm ²)	無加工試料 24 小時後活菌數之平均 Log 值	加工試料 24 小時後活菌數之平均值(CFU/cm ²)	加工試料 24 小時後活菌數之平均 Log 值	抗菌值 (R)
金黃色葡萄球菌 (Staphylococcus aureus)	1.3 × 10 ⁵	5.11	1.6 × 10 ³	3.20	1.91
大腸桿菌 (Escherichia coli)	1.8 × 10 ⁵	5.26	1.2 × 10 ⁴	4.08	1.18
克雷白氏肺炎菌 (Klebsiella pneumonia)	4.3 × 10 ⁵	5.63	9.8 × 10 ²	2.99	2.64

註：1. 試驗試片由委託單位製備提供。

2. 於取出試片後，立即並於標準狀態 2 個小時後，以目視觀察塗膜確認無膨脹、龜裂、脫離、針孔、軟化及生鏽等缺失，更須觀察浸漬過之溶液無著色與無混濁，與原狀試片比較光澤、變色程度不大時，評定為「酸浸漬試驗無異常」。

3. 目視觀察 2 片試片，試片的塗膜中央部分，兩片都無破裂或無基材或底塗層的露出時，則評定為「可耐規定次數的洗淨試驗」。

4. 依委託單位指定，以油性麥克筆污染於試片上，經靜置 24 小時之後以酒精擦拭後，在同一位置連續污染 100 次待筆跡乾燥後再以酒精擦拭，觀察塗膜有無光澤及顏色變化。

5. 日光反射指數由日光反射率及放射能量計算而得。

6. 抗菌性試驗：

菌株編號：金黃色葡萄球菌 BCRC 12154，大腸桿菌 BCRC 11634，克雷白氏肺炎菌 BCRC 16082。

抗菌值(R) = [無加工試料 24 小時後活菌數之平均 Log 值 - 加工試料 24 小時後活菌數之平均 Log 值]。

抗菌值(R)若 ≥ 1.0，表示有抗菌效果。

測試報告僅就委託者之委託事項提供測試結果，不對產品合法性做判斷。

----- 2 -----

本報告若有提供規範值，該規範值僅供參考，合格之判定以委託單位實際要求為準

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TWE 1031564

SGS Taiwan Ltd. No.61, Kai Fa Rd., Nanzih District, Kaohsiung City 811637, Taiwan / 811637 高雄市楠梓區開發路61號
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材料暨工程實驗室-高雄



Testing Laboratory
0526

試驗報告



報告編號：KV-24-03990

頁數：3 OF 3

報告發行日期：113年08月07日

註：7.使用黴菌種類：

黑麴菌 <i>Aspergillus brasiliensis</i>	BCRC 31512
嗜松藍狀菌 <i>Talaromyces pinophilus</i>	BCRC 30438
球毛殼菌 <i>Chaetomium globosum</i>	BCRC 31605
綠木黴 <i>Trichoderma virens</i>	BCRC 31613
出芽短梗黴菌 <i>Aureobasidium Pullulans</i>	BCRC 32364

菌種在樣品上生長狀況及等級：

培養時間 28 天

生長狀況

判定等級

無黴菌生長	0
微量生長(黴菌生長面積 < 10 %)	1
輕度生長(黴菌生長面積介於 10 % to 30 %)	2
中度生長(黴菌生長面積介於 30 % to 60 %)	3
重度生長(黴菌生長面積 > 60 %)	4

8.#試驗試片底材：鋁板。

9.樣品描述：塗膜試片。

10.本試驗報告膜厚試驗為本實驗室 TAF 認證範圍，其餘則非。抗黴性試驗委託 SGS-超微量工業安全實驗室-台北執行。(報告編號：CUO24500484M01)，非 TAF 認證範圍。抗菌性試驗委託 SGS-超微量工業安全實驗室-台北執行。(報告編號：CUO24500484)，非 TAF 認證範圍。

11.本實驗室執行試驗之地點同實驗室地址。

----- oOo -----

本報告若有提供規範值，該規範值僅供參考，合格之判定以委託單位實際要求為準

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SGS Taiwan Ltd.
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Material and Engineering Laboratory-Kaohsiung

Test Report

Report No. : KV-24-03990A
Page No. : 1 OF 3
Issuance Date : Aug. 07, 2024
Reissuance Date : Aug. 07, 2024

Xinsheng International Development CO., LTD.

Product Name Fluorocarbon Painting - Powder Coating
Product Type Fluorine Art Polychrome
Product Color Multicolours
Manufacturer Xinsheng International Development CO., LTD./
NAN PAO RESINS CHEMICAL CO., LTD./
WINBAND INTERNATIONAL INDUSTRIAL CO., LTD.
Supplier Xinsheng International Development CO., LTD./
YAO REPUTATION TECHNOLOGY INDUSTRY CO., LTD.
Product Submitted By Xinsheng International Development CO., LTD.
Date of Sample Received Apr. 23, 2024
Date of Testing Apr. 23, 2024~Aug. 07, 2024
Remark The information mentioned in the above section and the following report content marks # are provided by Client.(Exclude Test Witnessed By, Test Method, Number of test, Date of Sample Received and Date of Testing)

TEST RESULTS :

Test Item	Test Method	Test Result
Acid resistance(30 % sulfuric acid, 23 °C, 500 h)	CNS 10757 : 1995	There is no abnormality, even immersed in acid (Note 2)
Alkali resistance(30 % sodium hydroxide, 23 °C, 500 h)	JIS K5400 : 1990	No cracking and peeling
Scrub resistance(30,000 times)	CNS 10757 : 1995	Endurable for washings for 30,000 times (Note 3)
Resistance to repeated effects of cold and heat(23±2 °C in water /18h→ -20±2 °C /3h→ 50±3 °C /3h, 10 cycles)	CNS 8082 : 2021	There are no cracking, peeling or swelling on the surface of the sample, and there is no significant discoloration or loss of gloss.
Stain resistance	Note 4	No gloss change, no color change
Pencil hardness	Scratch hardness Gouge hardness	CNS 10757 : 1995
		F 9H
Emittance	ASTM C1371-04a	0.90
Solar Reflection Index(SRI) (12 W·m ⁻² ·K ⁻¹)	ASTM E1980-11	87
Solar reflectance(%)	ASTM C1549-16	71.1
Film thickness(µm)	CNS 9007 : 1995 Eddy current thickness gauge method	145
Fungi resistance	ASTM G21-15	Rating 0 (Note 7)

----- 1 -----

Signed for and on behalf of
SGS Taiwan Ltd.

The required specification(s) offered in this test report is/are for reference only.
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Testing Laboratory
0526

Material and Engineering Laboratory-Kaohsiung

Test Report



Report No. : KV-24-03990A
Page No. : 2 OF 3
Issuance Date : Aug. 07, 2024
Reissuance Date : Aug. 07, 2024

Antimicrobial Effectiveness Test :

Test Method: JIS Z2801 : 2010/AMD 1 : 2012 Antibacterial products – Test for antibacterial activity and efficacy

Contact time: 24 hours

Organism	Average of the number of viable cells on untreated sample after 24 hours (CFU/cm ²)	Log average of the number of viable cells on untreated sample after 24 hours	Average of the number of viable cells on treated sample after 24 hours (CFU/cm ²)	Log average of the number of viable cells on treated sample after 24 hours	Antibacterial activity, R
Staphylococcus aureus	1.3 × 10 ⁵	5.11	1.6 × 10 ³	3.20	1.91
Escherichia coli	1.8 × 10 ⁵	5.26	1.2 × 10 ⁴	4.08	1.18
Klebsiella pneumonia	4.3 × 10 ⁵	5.63	9.8 × 10 ²	2.99	2.64

Note : 1. #Test ratio (weight ratio) prime resin : hardener = 100 : 1.

2. Observe visually, and when blistering, cracking, peeling, pinhole and softening are not confirmed on paint films and further, coloration and turbidity of immersing solution do not exist and further on comparison with the original condition test piece, the variation of gloss and degree of discoloration are not larger, evaluate that "there is no abnormality, even immersed in acid".
3. Observe visually, carry out the test on two sheets of test piece and when the exposure of substrate of test piece or paint film of undercoat by breakage or abrasion in both two sheets at the middle part of test piece is not confirm, evaluate that "it is endurable to washing test of specified number of times".
4. According to the client, use an oily marker pen to contaminate the test piece, after leaving it for 24 hours, wipe it with alcohol. Continue to contaminate the same position 100 times. After the writing is dry, wipe it with alcohol again. Observe whether the coating film is lossing gloss and color changes.
5. Solar reflection index is calculated from solar reflectance and radiant energy.
6. Antibacterial test :

Organism No. : Staphylococcus aureus BCRC 12154, Escherichia coli BCRC 11634, Klebsiella pneumonia BCRC 16082.

Anti-microbial Activity(R) =[Log average of the number of viable cells on untreated sample after 24 hours – Log average of the number of viable cells on treated sample after 24 hours].

R shall be ≥ 1.0 for Anti-microbial effectiveness.

The test report merely reflects the test results of the consigned matters of the client and is not a certification of the legitimacy of the related products.

----- 2 -----

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Testing Laboratory
0526

Material and Engineering Laboratory-Kaohsiung

Test Report



Report No. : KV-24-03990A
Page No. : 3 OF 3
Issuance Date : Aug. 07, 2024
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Note : 7. Organism No. :

Aspergillus brasiliensis	BCRC 31512
Talaromyces pinophilus	BCRC 30438
Chaetomium globosum	BCRC 31605
Trichoderma virens	BCRC 31613
Aureobasidium Pullulans	BCRC 32364

Observed growth on specimen and rating :

Time of incubation : 28 days.

Observed growth	Rating
No growth	0
Traces of growth (less than 10 %)	1
Light growth (10 to 30 %)	2
Medium growth (30 to 60 %)	3
Heavy growth (60 % to complete coverage)	4

8. #Test specimen substrate: aluminum plate.

9. Item Description: coated test pieces.

10. Film thickness test is within our laboratory's TAF accreditation scope in this test report, but the rest are not. Fungi resistance test was subcontracted to SGS Ultra Trace Industrial Safety Hygiene Laboratory-Taipei. (Report No.: CUO24500484M01), Fungi resistance test is not within its accreditation scope. Antimicrobial effectiveness test was subcontracted to SGS Ultra Trace Industrial Safety Hygiene Laboratory-Taipei. (Report No.: CUO24500484), Antimicrobial effectiveness test is not within its accreditation scope.

11. The testing site is the same as the laboratory address.

12. This Test Report is an additional original report of KV-24-03990. Issued date : Aug. 07, 2024.

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For Question Please
Contact with SGS
www.sgs.com.tw

測試報告

Test Report

號碼(No.): EKR24500834

日期(Date): 24-May-2024

頁數(Page): 1 of 8

欣聖國際開發有限公司 (XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.)
臺南市官田區二鎮里二鎮56之26號 (NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN)

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

送樣廠商(Sample Submitted By) : 欣聖國際開發有限公司 (XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.)
樣品名稱(Sample Name) : 氟碳粉體塗料
樣品型號(Style/Item No.) : 氟藝彩飾

收件日(Sample Receiving Date) : 17-May-2024
測試期間(Testing Period) : 17-May-2024 to 24-May-2024

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

測試結果(Test Results) : (2) 其他測試項目請見下一頁。(Please refer to next pages for the other item(s).)
請參閱下一頁 (Please refer to following pages.)

結論(Conclusion) : (1) 根據客戶所提供的樣品，其鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP的測試結果符合RoHS 2011/65/EU Annex II暨其修訂指令(EU) 2015/863之限值要求。(Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.)


報告簽署人/張伯睿 博士/部經理
Ray Chang, Ph.D./ Department Manager
Signed for and on behalf of
SGS TAIWAN LTD.
化學實驗室-高雄/Chemical Laboratory-Kaohsiung



PIN CODE: 1BC51A7E

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測試報告

Test Report

號碼(No.): EKR24500834

日期(Date): 24-May-2024

頁數(Page): 2 of 8

欣聖國際開發有限公司 (XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.)
臺南市官田區二鎮里二鎮56之26號 (NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN)

測試部位敘述 (Test Part Description)

No.1 : 棕色/銀色片狀 (BROWN/SILVER COLORED SHEET)

測試結果 (Test Results)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
鎘 (Cd) (Cadmium (Cd))	參考IEC 62321-5: 2013 · 以感應耦合電漿發射光譜儀分析 · (With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	100
鉛 (Pb) (Lead (Pb))		mg/kg	2	n.d.	1000
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017 · 以感應耦合電漿發射光譜儀分析 · (With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
六價鉻 Cr(VI) (Hexavalent Chromium Cr(VI))	參考IEC 62321-7-2: 2017 · 以紫外光-可見光分光光度計分析 · (With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.)	mg/kg	8	n.d.	1000
一溴聯苯 (Monobromobiphenyl)	參考IEC 62321-6: 2015 · 以氣相層析儀/質譜儀分析 · (With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
二溴聯苯 (Dibromobiphenyl)		mg/kg	5	n.d.	-
三溴聯苯 (Tribromobiphenyl)		mg/kg	5	n.d.	-
四溴聯苯 (Tetrabromobiphenyl)		mg/kg	5	n.d.	-
五溴聯苯 (Pentabromobiphenyl)		mg/kg	5	n.d.	-
六溴聯苯 (Hexabromobiphenyl)		mg/kg	5	n.d.	-
七溴聯苯 (Heptabromobiphenyl)		mg/kg	5	n.d.	-
八溴聯苯 (Octabromobiphenyl)		mg/kg	5	n.d.	-
九溴聯苯 (Nonabromobiphenyl)		mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)	mg/kg	-	n.d.	1000	

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測試報告

Test Report

號碼(No.): EKR24500834

日期(Date): 24-May-2024

頁數(Page): 3 of 8

欣聖國際開發有限公司 (XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.)

臺南市官田區二鎮里二鎮56之26號 (NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
一溴聯苯醚 (Monobromodiphenyl ether)	參考IEC 62321-6: 2015 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
二溴聯苯醚 (Dibromodiphenyl ether)		mg/kg	5	n.d.	-
三溴聯苯醚 (Tribromodiphenyl ether)		mg/kg	5	n.d.	-
四溴聯苯醚 (Tetrabromodiphenyl ether)		mg/kg	5	n.d.	-
五溴聯苯醚 (Pentabromodiphenyl ether)		mg/kg	5	n.d.	-
六溴聯苯醚 (Hexabromodiphenyl ether)		mg/kg	5	n.d.	-
七溴聯苯醚 (Heptabromodiphenyl ether)		mg/kg	5	n.d.	-
八溴聯苯醚 (Octabromodiphenyl ether)		mg/kg	5	n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether)		mg/kg	5	n.d.	-
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.	1000
鄰苯二甲酸丁苄甲酯 (BBP) (Butyl benzyl phthalate (BBP))	參考IEC 62321-8: 2017 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	1000
鄰苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)		mg/kg	50	n.d.	-
鄰苯二甲酸二異癸酯 (DIDP) (Diisodecyl phthalate (DIDP)) (CAS No.: 26761-40-0, 68515-49-1)		mg/kg	50	n.d.	-
鄰苯二甲酸二正辛酯 (DNOP) (Di-n-octyl phthalate (DNOP)) (CAS No.: 117-84-0)		mg/kg	50	n.d.	-

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No.61, Kai-Fa Road, Nanzih Dist., Kaohsiung, Taiwan

Member of the SGS Group



測試報告

Test Report

號碼(No.): EKR24500834

日期(Date): 24-May-2024

頁數(Page): 4 of 8

欣聖國際開發有限公司 (XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.)

臺南市官田區二鎮里二鎮56之26號 (NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN)

備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 0.1% = 1000ppm
2. MDL = Method Detection Limit (方法偵測極限值)
3. n.d. = Not Detected (未檢出) ; 小於MDL / Less than MDL
4. "-" = Not Regulated (無規格值)
5. 除非另有說明，參照ILAC-G8:09/2019，採用簡單二元(w=0)允收規則進行符合性判定；根據此規則，符合性結果之判定係以測試結果與限值做比較。(Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019. According to this rule, the judgement of conformity is based on the comparing test results with limits.)

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測試報告

Test Report

號碼(No.): EKR24500834

日期(Date): 24-May-2024

頁數(Page): 5 of 8

欣聖國際開發有限公司 (XINSHENG INTERNATIONAL DEVELOPMENT CO., LTD.)

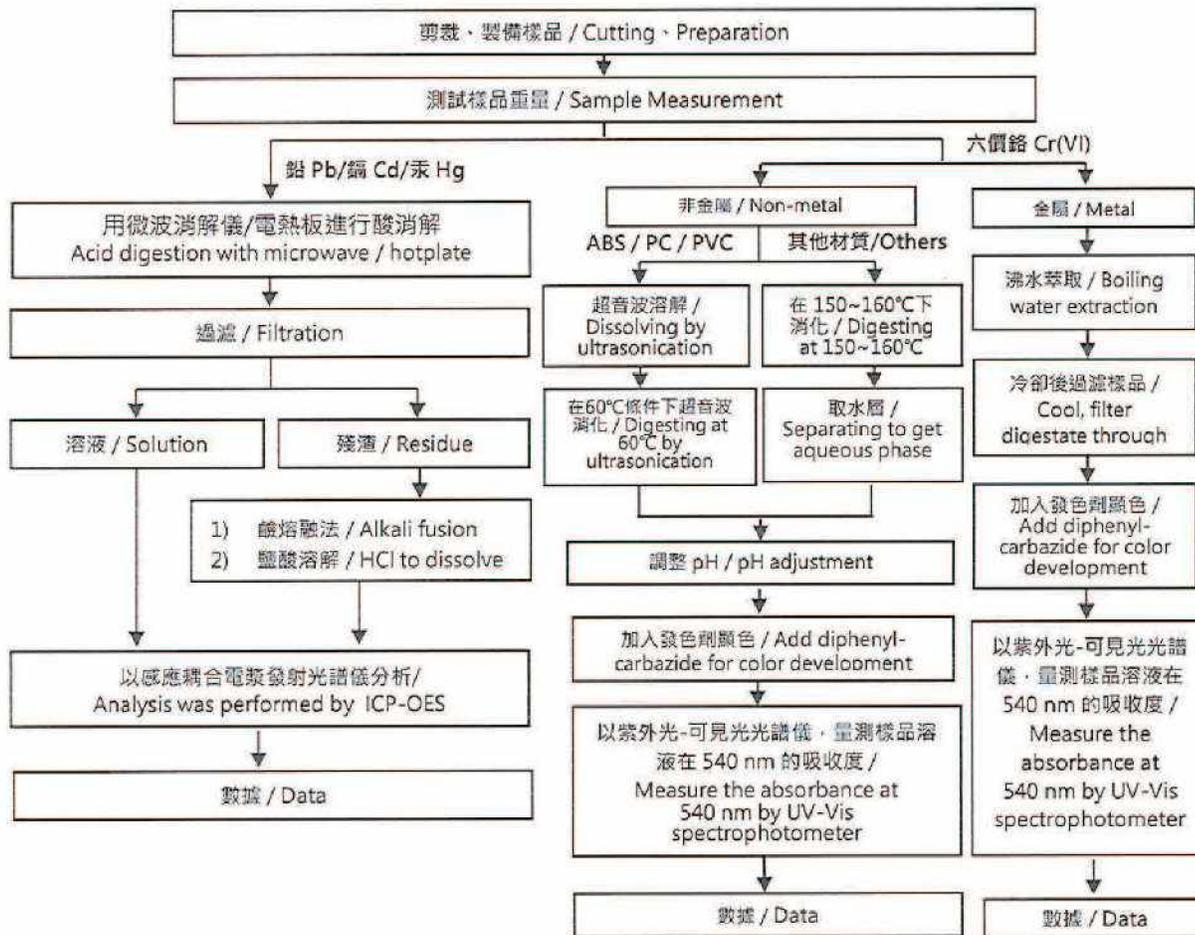
臺南市官田區二鎮里二鎮56之26號 (NO. 56-26, ERZHEN, GUANTIAN DIST., TAINAN CITY, TAIWAN)

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

根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外)

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

(Cr⁶⁺ test method excluded)



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測試報告
Test Report

號碼(No.): EKR24500834

日期(Date): 24-May-2024

頁數(Page): 6 of 8

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



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Test Report

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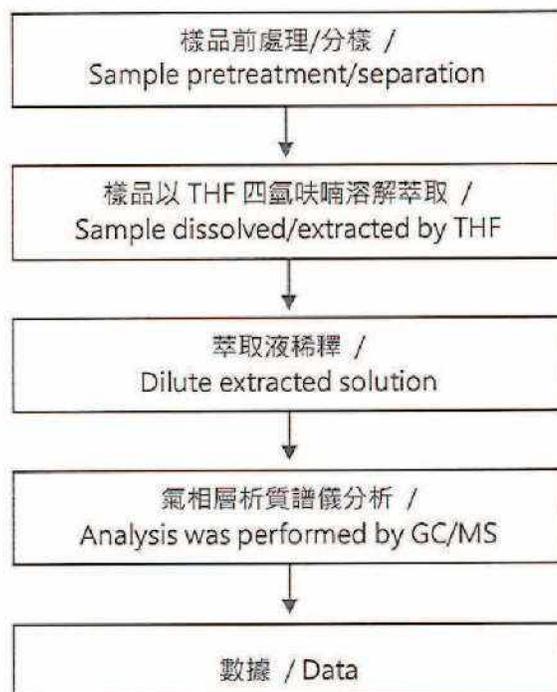
日期(Date): 24-May-2024

頁數(Page): 7 of 8

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

【測試方法/Test method: IEC 62321-8】



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測試報告

Test Report

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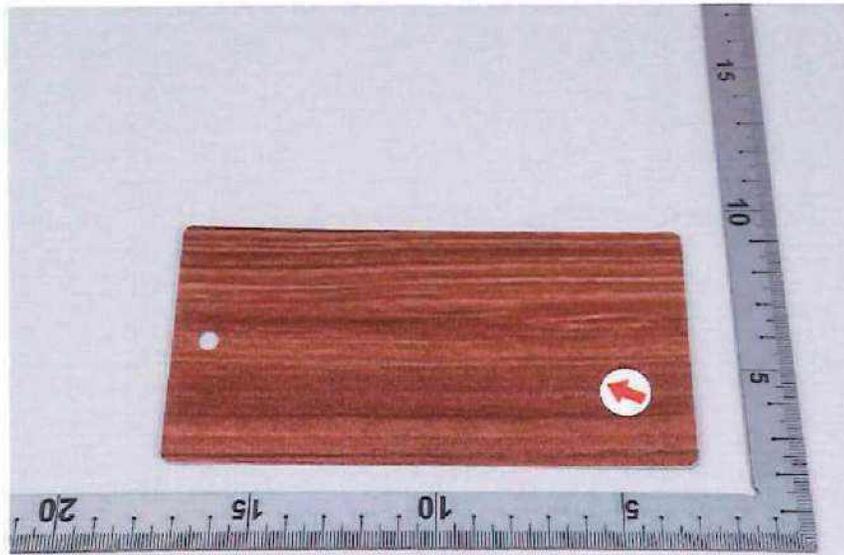
頁數(Page): 8 of 8

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

EKR24500834



** 報告結尾 (End of Report) **

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材料暨工程實驗室-台北

試驗報告



報告編號：HV-19-02410

頁數：1 OF 3

報告日期：2019年05月20日

耀譽科技工業有限公司

產品名稱：氟碳粉體塗料
產品型號：氟碳粉體塗料<長效蓄能夜光型>
產品顏色：米白色
製造廠商：耀譽科技工業有限公司/華邦國際工業股份有限公司
供應廠商：耀譽科技工業有限公司
送驗廠商：耀譽科技工業有限公司
收件日期：2019年05月07日
試驗日期：2019年05月07日~2019年05月20日
備註：1. 以上資料由顧客提供(收件及試驗日期除外)
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未經本公司事先書面同意，此報告不可部分複製
3. 下述報告內容標示#處由顧客提供

本實驗室依據顧客所提供之試驗需求與樣品進行試驗，結果說明如下：

試驗需求：輝度試驗

試驗方法：請參見附頁

試驗結果：請參見附頁

----- 1 -----


報告簽署人

本報告若有提供規範值，該規範值僅供參考，合格之判定以委託單位實際要求為準

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材料暨工程實驗室-台北

試驗報告



報告編號：HV-19-02410

頁數：2 OF 3

報告日期：2019年05月20日

輝度試驗

試驗設備：

名稱	廠牌	型號
輝度計	KNOICA MINOLTA	LS-100

試驗方法：

參考 JIS Z 9107(2008) Safety colours and safety signs-Classification, performance and durability of safety signs

試驗條件：

黑暗環境放置時間：至少 48 小時
 激發光源：D65
 光源照度：200±10% lux
 激發時間：20 分鐘

試驗結果：

試驗項目	試驗結果	
輝度試驗(mcd/ m ²)	第 2 分鐘	675
	第 10 分鐘	172
	第 20 分鐘	83
	第 30 分鐘	57
	第 60 分鐘	28

----- 2 -----

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試驗報告

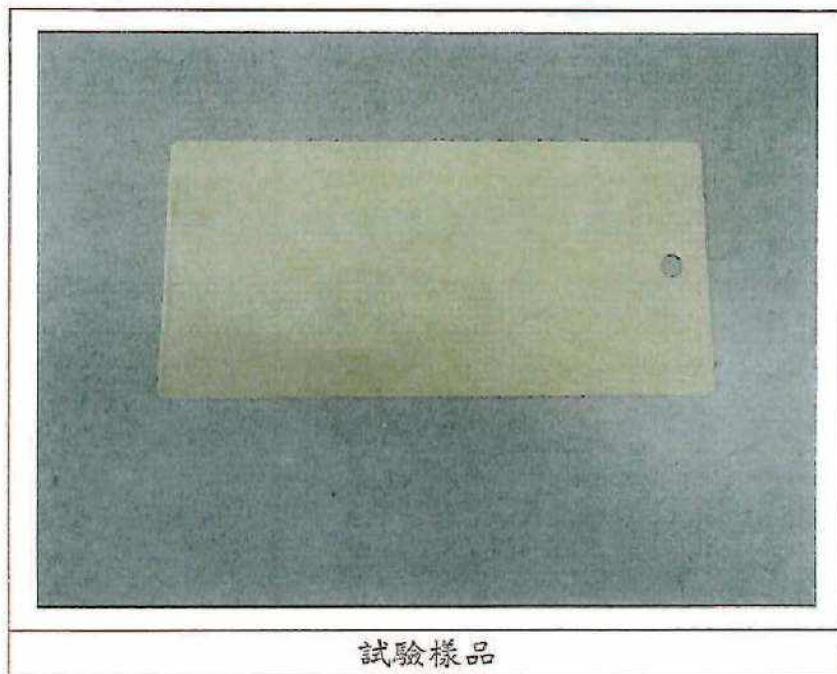


報告編號：HV-19-02410

頁數：3 OF 3

報告日期：2019年05月20日

樣品照片：



試驗樣品

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材料及工程實驗室-台北



試驗報告

報告編號: HV-14-06979Z
頁數: 1 OF 1
報告日期: 104年04月15日

委託單位: 華邦國際工業股份有限公司/耀睿科技工業有限公司
樣品名稱: 氟碳粉體塗料
送驗人員: 華邦國際工業股份有限公司(蔡文彥)
收件日期: 103年11月10日
試驗日期: 103年11月10日~104年04月15日
試驗規範: AAMA 2605-11

註: 1. 以上資料由顧客提供(收件及試驗日期除外)
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試驗結果:

試驗項目	試驗方法	試驗結果	要求值
乾燥硬度(塗膜破損法)	參考 ASTM D3363-05(2011)e2	6H(無破損)	F 以上
附著性 a. 乾燥後 b. 浸水後 c. 浸沸水後	ASTM D3359-09e2	5B(100%No fail) 5B(100%No fail) 5B(100%No fail)	漆面無剝離 及起泡現象
耐衝擊性(160in-lb)	參考 ASTM D2794-93(2004)	無剝離現象	漆面無剝離現象
耐磨性(L/mil)	ASTM D968-05(2010)	>40(註2.)	最低為40
耐化學性 a. 耐鹽酸試驗	AAMA 2605-11	無起泡及無目 視可見之改變	無起泡及無目 視可見之改變
b. 耐硝酸性 1. 外觀 2. ΔE _H		無起泡及無目 視可見之改變 0.10	無起泡及無目 視可見之改變 <5
c. 灰泥		外觀無明顯變化 及無失去附著力	外觀無明顯變化 及無失去附著力
d. 清潔劑		無起泡現象, 外觀無明顯變化	無起泡現象, 外觀無明顯變化
e. 耐玻璃清潔劑		無起泡現象, 外觀無明顯變化	無起泡現象, 外觀無明顯變化

註: 1. 本試驗報告附著性、耐化學性試驗為 TAF 認可項目。耐磨性試驗委託 SGS 材料及工程實驗室-高雄執行。
2. 依委託單位指定, 試驗執行至 >40 L/mil 時即停止, 此時塗膜並未破損。
3. 要求值由顧客提供。

--- o O o ---

規範要求值僅供參考, 合格之判定以委託單位實際要求為準。

高偉明
報告簽署人

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證書號碼 5346

證書號碼 149279



材料及工程實驗室-台北



試驗報告



報告編號：HV-15-01805Z
頁數：1 OF 1
報告日期：104年06月16日

委託單位：華邦國際工業股份有限公司/耀譽科技工業有限公司
樣品名稱：氟碳粉體塗料
送驗人員：華邦國際工業股份有限公司(蔡文彥)
收件日期：103年11月10日
試驗日期：103年11月10日~104年06月15日
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試驗結果：

試驗項目	試驗方法	試驗結果
耐濕性(5000小時)	AAMA 2605-11/ ASTM D2247-11	無起泡
耐鹽霧性(5000小時)	AAMA 2605-11/ ASTM B117-11	無破損現象

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規範要求值僅供參考，合格之判定以委託單位實際要求為準。

高偉明
報告簽署人

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TWB 51575



材料及工程實驗室-高雄



Testing Laboratory
0526

試驗報告



報告編號: KV-18-08200
頁數: 1 OF 1
報告日期: 107年09月11日

華邦國際工業股份有限公司
嘉義縣太保市嘉太工業區中興路3號

產品名稱: 熱固化粉末塗料
產品型號: 氟碳粉體塗料
製造廠商: 華邦國際工業股份有限公司
供應廠商: 華邦國際工業股份有限公司 / 耀譽科技工業有限公司
送驗廠商: 華邦國際工業股份有限公司 / 耀譽科技工業有限公司
收件日期: 107年08月31日
試驗日期: 107年08月31日~107年09月11日
備註: 1.以上資料由顧客提供(收件及試驗日期除外)
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試驗結果:

試驗項目	試驗方法	試驗結果
附著性(5 mm)	CNS 10757(1995)	10點(無剝離)
衝擊試驗($\phi=12.7$ mm, 500 g, 30 cm)		無龜裂、剝離現象
鉛筆硬度		3H
刮傷法		9H
破損法		

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本報告若有提供規範值,該規範值僅供參考,合格之判定以委託單位實際要求為準

報告簽署人

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材料暨工程實驗室-台北



試驗報告



報告編號：HV-18-05287-1
頁數：1 OF 1
報告日期：107年11月13日

委託單位：耀譽科技工業有限公司、米平方藝術工程有限公司
樣品名稱：氟碳粉體塗料
送驗人員：華邦國際工業股份有限公司(蔡文彥)
收件日期：107年10月12日
試驗日期：107年10月12日~107年11月13日
備註：1.以上資料由顧客提供(收件及試驗日期除外)
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試驗結果：

試驗項目	試驗方法	試驗結果
膜厚(μm)	ASTM D1400-00	86
光澤(60°)	CNS 10756-1(1994)	89
耐屈曲性(φ10mm)	CNS 10757(1995)	耐屈曲
耐酸性 (5%H ₂ SO ₄ ，23℃，500小時)		酸浸漬試驗無異常
耐鹼性 (5%NaOH，23℃，500小時)		鹼浸漬試驗無異常

註：1. 試驗試片由顧客提供。

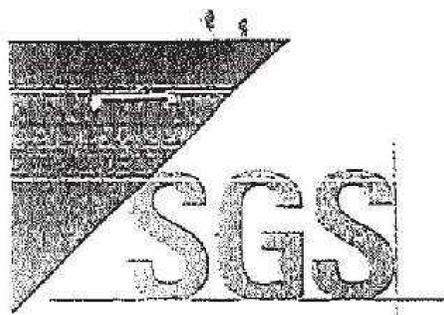
2. 本試驗報告取代 HV-18-05287，原試驗報告作廢，報告修改日期 107年11月26日。

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材料及工程實驗室-台北

試驗報告



報告編號：HV-14-06665X

頁數：1 OF 4

報告日期：2015年09月10日

華邦國際工業股份有限公司/耀譽科技工業有限公司

我們依照顧客的要求，根據顧客提供的產品敘述如下：

產品敘述： 氟碳粉體塗料
備註： 除非另有說明，此報告結果僅對測試之樣品負責
未經本公司事先書面同意，此報告不可部分複製

我們依照顧客的要求，根據顧客送交之樣品進行試驗結果如下：

委託試驗要求：(依照顧客提供之測試規格進行試驗，詳細內容請參照附頁。)

耐候試驗

試驗結果：

一如附頁所示

收件日期：

2014年06月18日

試驗日期：

2014年06月18日~2015年09月10日

高偉明
報告簽署人

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材料及工程實驗室-台北

試驗報告



報告編號：HV-14-06665X

頁數：2 OF 4

報告日期：2015年09月10日

試驗設備：

名稱	廠牌	型號
Accelerated Weathering Tester	Q-PANEL	QUV/SE
Spectrophotometer	MINOLTA	CM-3600d
光澤計	BYK	4446
膜厚計	ELCOMETER	A456FNFBS

實驗室環境條件：

環境溫度： 23±2°C
相對濕度： 50±5%RH

試驗方法：

- ASTM G154-12a Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
- ASTM D2244-14 Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
- ASTM D523-08 Standard Test Method for Specular Gloss
- ASTM D1400-00 Standard Test Method for Nondestructive Measurement of Dry Film Thickness of Nonconductive Coatings Applied to a Nonferrous Metal Base
- ASTM D4214-07 Standard Test Method for Evaluating the Degree of Chalking of Exterior Paint Films

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TWB 6699654



材料及工程實驗室-台北

試驗報告



報告編號：HV-14-06665X
頁數：3 OF 4
報告日期：2015年09月10日

試驗條件：

耐候試驗

燈管： UVA-340
照射能量： 0.89W/m²/nm 在 340 nm
每一循環條件： 8小時照光，黑板溫度60°C；4小時冷凝，黑板溫度50°C
試驗時間： 10000小時

總色差量測 (ΔE*ab)

光源： CIE illuminant D₆₅
標準視角： CIE 1964 standard colorimetric observer (10° observer)
量測孔徑： φ 25.4mm
量測間距： 10mm
波長範圍： 360nm~740nm
量測模式： 反射式量測

光澤度

射角： 85°

試驗結果：

試驗項目		試驗結果
耐候試驗	外觀檢查	目視外觀無膨脹、剝離、龜裂現象
	色差分析(ΔE*ab)	1.26
	光澤保持率(%)	31.9
	膜厚保持率(%)	89.7
	粉化	2級

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TWB6699653



材料及工程實驗室-台北

試驗報告

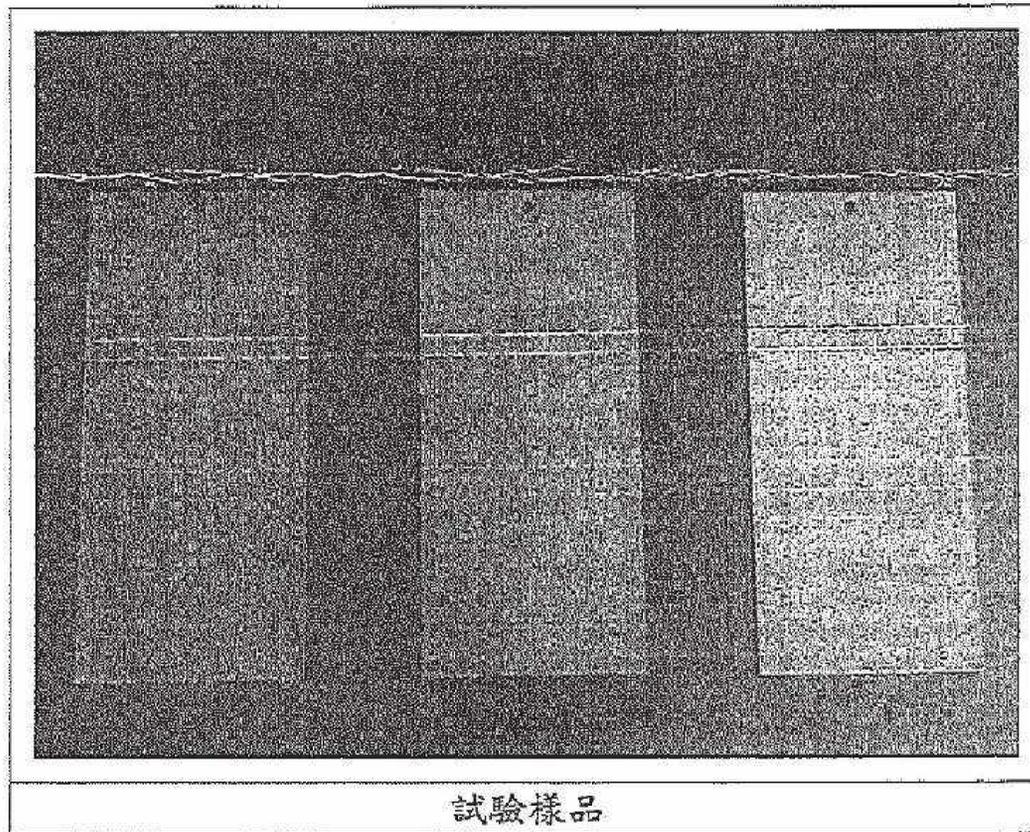


報告編號：HV-14-06665X

頁數：4 OF 4

報告日期：2015年09月10日

試驗照片：



試驗樣品

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TWB6699652

SGS Taiwan Ltd.
台灣檢驗科技股份有限公司

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材料暨工程實驗室-高雄



試驗報告



報告編號：KV-21-09044

頁數：1 OF 2

報告日期：111年01月19日

南寶樹脂化學工廠股份有限公司

產品名稱：塗特佳室外型粉體塗料

送驗廠商：南寶樹脂化學工廠股份有限公司

收件日期：110年10月07日

試驗日期：110年10月07日~111年01月19日

備註：1.以上資料由顧客提供(收件及試驗日期除外)

2.除非另有說明，此報告結果僅對測試之樣品負責

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3.下述報告內容標示#處由顧客提供

試驗結果：

試驗項目	試驗方法	試驗結果	#AAMA 2603-20 規範要求值	
乾膜厚度(μm)	ASTM D7091-20	93.1	20 以上	
光澤度(60°)	AAMA 2603-20	48	規格值±5	
密著性(2 mm)		乾膜	5B (無任何剝離現象)	4B 以上
		濕膜	5B (無任何剝離現象)	
	沸騰水	5B (無任何剝離現象)		
耐衝擊性(變型 3 ± 0.3 mm) (5/8", 56 in-lb)		漆面無剝落現象	漆面無剝落現象	
耐化學性				
a.耐鹽酸(15 mins)	AAMA 2603-20	表面無水泡的產生以及明顯的外觀變化	不得有水泡的產生以及明顯的外觀變化	
b.耐灰泥 (38 °C, 100 % R.H., 24 hr)		灰泥塊能輕易取下，任何殘留物能輕易用濕布拭去，水泥痕跡能輕易用 10 % 氫氟酸拭去且塗膜無剝離及外觀變化	灰泥塊能輕易取下，任何殘留物能輕易用濕布拭去，水泥痕跡能輕易用 10 % 氫氟酸拭去且塗膜無剝離及外觀變化	
c.耐清潔劑 (3 %, 38 °C, 72 hr)		表面無水泡的產生及明顯的外觀變化、密著性無剝離現象	不得有水泡的產生及明顯的外觀變化、密著性無剝離現象	
耐濕性 (38 °C, 100 % R.H, 1500 hr)	AAMA 2603-20 ASTM D2247-15 ASTM D714-02	起泡數量：無起泡 起泡尺寸：無起泡	起泡數量不超過 Few 起泡尺寸不超過 8	
鹽水噴霧試驗(1500 hr)	AAMA 2603-20 ASTM B117-19	切割線剝落等級：10 起泡等級：無起泡	切割線剝落等級 7 以上 起泡等級 8 以上	

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郭秀如

報告簽署人

本報告若有提供規範值，該規範值僅供參考，合格之判定以委託單位實際要求為準

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材料暨工程實驗室-高雄



試驗報告



報告編號：KV-21-09044

頁數：2 OF 2

報告日期：111年01月19日

試驗結果：

試驗項目	試驗方法	試驗結果	#客戶要求值
乾膜硬度(破損法)	ASTM D3363-20	5H	硬度H以上無破損
耐候性(1500 hr)	ASTM G155-13	無裂紋或失去黏性	無裂紋或失去黏性

註：1.試驗試片由委託單位製備提供。

2.鹽水噴霧試驗條件：

鹽液溶液：(5±1)W/V%。

試驗室溫度：(35±2)°C。

飽和空氣溫度：(46~49)°C。

噴霧量(mL/hr/80cm²)：(1.0~2.0)。

收集鹽霧pH值：(6.5~7.2)。

試片擺放角度：(15~30)°。

3.耐候性試驗條件：

使用光源：氙弧燈

照射強度：0.35 (W/m²·nm) at 340 nm

黑板溫度：(63±3)°C

測試週期：102分鐘照光+18分鐘照光及噴水

4.本試驗報告之試驗地點同實驗室地址。

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本報告若有提供規範值,該規範值僅供參考,合格之判定以委託單位實際要求為準

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TWD 4385932



材料暨工程實驗室-高雄



試驗報告



報告編號：KV-21-09045
頁數：1 OF 2
報告日期：111年05月18日

南寶樹脂化學工廠股份有限公司

產品名稱: 塗特佳超耐候粉體塗料
送驗廠商: 南寶樹脂化學工廠股份有限公司
收件日期: 110年10月07日
試驗日期: 110年10月07日~111年05月18日
備註: 1.以上資料(樣品名稱、送驗人員、會驗人員、試驗方法、試驗數量、收件日期及試驗日期除外)及下述報告內容標示#處係由顧客提供
2.除非另有說明,此報告結果僅對測試之樣品負責
未經本公司事先書面同意,此報告不可部分複製

試驗結果:

試驗項目	試驗方法	試驗結果	#AAMA 2604-20 規範要求值	
乾膜厚度(μm)	ASTM D7091-20	96.0	30 以上	
光澤度(60°)	AAMA 2604-20	45	規格值±5	
密著性(2 mm)		乾膜	5B (無任何剝離現象)	4B 以上
		濕膜	5B (無任何剝離現象)	
	沸騰水	5B (無任何剝離現象)		
耐衝擊性(變型 3 ± 0.3 mm) (5/8", 53.4 in-lb)		漆面無剝落現象	漆面無剝落現象	
耐磨耗 (L)	AAMA 2604-20 ASTM D968-17	可承受 40L 的沙子	可承受 40L 的沙子	
耐化學性				
a.耐鹽酸(15 mins)	AAMA 2604-20	表面無水泡的產生以及明顯的外觀變化	不得有水泡的產生以及明顯的外觀變化	
b.耐灰泥 (38 °C, 100 % R.H., 24 hr)		灰泥塊能輕易取下,任何殘留物能輕易用濕布拭去,水泥痕跡能輕易用 10 % 氫氯酸拭去且塗膜無剝離及外觀變化	灰泥塊能輕易取下,任何殘留物能輕易用濕布拭去,水泥痕跡能輕易用 10 % 氫氯酸拭去且塗膜無剝離及外觀變化	
c.耐硝酸(30 mins)		外觀無明顯變化且 ΔE* = 0.11	外觀無明顯變化且顏色變化不超過 5 ΔE*	
d.耐清潔劑 (3 %, 38 °C, 72 hr)		表面無水泡的產生及明顯的外觀變化、密著性無剝離現象	不得有水泡的產生及明顯的外觀變化、密著性無剝離現象	
耐濕性 (100 °F, 100 % R.H, 3000 hr)	AAMA 2604-20 ASTM D2247-15 ASTM D714-02	起泡數量: 無起泡 起泡尺寸: 無起泡	起泡數量不超過 Few 起泡尺寸不超過 8	
鹽水噴霧試驗(5000 hr)	AAMA 2604-20 ASTM B117-19	切割線剝落等級: 10 起泡等級: 無起泡	切割線剝落等級 7 以上 起泡等級 8 以上	

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郭秀如

報告簽署人

本報告若有提供規範值,該規範值僅供參考,合格之判定以委託單位實際要求為準

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SGS

材料暨工程實驗室-高雄

Testing Laboratory
0526

試驗報告



報告編號：KV-21-09045

頁數：2 OF 2

報告日期：111年05月18日

試驗結果：

試驗項目	試驗方法	試驗結果	#客戶要求值
乾膜硬度(破損法)	ASTM D3363-20	7H	硬度 F 以上無破損
耐候性(3000 h)	ASTM G155-13 ASTM D4214-07 ASTM D2244-16 ASTM D523-14 ASTM B244-09	1. 8 以上 2. $\Delta E = 0.72$ 3. 光澤保持率: 63.0% 4. 膜厚損失率: 1.10%	1. 粉化等級 8 以上 2. $5\Delta E$ 以下 3. 光澤保持率: 30% 以上 4. 膜厚損失率: 10% 以下

註：1. 試驗試片由委託單位製備提供。

2. 鹽水噴霧試驗條件：

鹽液溶液：(5 ± 1) W/V%。

試驗室溫度：(35 ± 2) °C。

飽和空氣溫度：(46 ~ 49) °C。

噴霧量(mL/hr/80cm²)：(1.0 ~ 2.0)。

收集鹽霧 pH 值：(6.5 ~ 7.2)。

試片擺放角度：(15 ~ 30)°。

3. 耐候性試驗條件：

使用光源：氙弧燈

照射強度：0.35 (W/m²·nm) at 340 nm

黑炭板溫度：(63 ± 3) °C

測試週期：102 分鐘照光+18 分鐘照光及噴水

4. 本試驗報告光澤保持率、膜厚減損率試驗非 TAF 認可項目。

5. 本試驗報告之試驗地點同實驗室地址。

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本報告若有提供規範值, 該規範值僅供參考, 合格之判定以委託單位實際要求為準

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塗特佳 T76 系列
TUTERGA series

編輯者Comliler: 王晉嘉

發行日期 Issued Date: 2024/4/2

Technical Data Sheet

產品說明Product Description:

本系列產品使用耐候型的聚酯樹脂及耐候級顏料加工生產而成。其漆膜堅韌耐久、耐候性佳、角緣包覆性良好、耐黃變性佳、適用於摩擦帶電槍及電暈噴槍。且本系列產品符合RoHS相關規定，是室外漆的最佳選擇。

This series of products is made by the weather durable polyester resin and weather durable pigment. Its coating film is tough and has excellent weathering resistance, good edge coverage, excellent yellowing resistance. It is suitable for tribo gun and corona gun to use. This series of products complies with ROHS relevant regulation It is the best choice of the outdoor coating.

特性Feature & Benefits:

- 1、耐候性良好。
Excellent weather resistance;
- 2、機械性能佳。
Good mechanical properties
- 3、耐黃變性佳。
Excellent yellowing resistance
- 4、角緣覆蓋性良好。
Excellent edge coverage

應用Application :

塗特佳 T-76適用於需要高度防蝕性與耐候性等要求之物件的美觀保護塗裝。如戶外傢俱、汽車零件、空調器、園藝器具、圍欄、護欄、農機殼備、防火門、鋁門窗框、遮陽板、露營器材等金屬製品。

T-76 series is used for coating product which needs high anticorrosion & weather resistance, such as outdoor furniture, parts of the automobile, air- conditioner, horticultural tool, fence, farm equipment, fireproof door, aluminum window & door Frame, camping equipment, etc.

規格Technical Data:

項目 Items	測試標準 Test Standard
耐曲屈 Flexibility	Ø 6 mm 180°
耐衝擊 Impact	Ø 5/8±60inLb (Ø 1/4" ±50cmkg)
鉛筆硬度 Hardness	F 以上 Above F
密著性 Tape adhesion	100/100 不脫落 no peel off
耐候性 Weathering	QUV 1500 hrs
耐鹽霧 Salt Spray	1500小時以上 Above 1500 hrs

使用條件User Condition:

烘烤條件Curing condition	試產品而定
靜電值Static setting value	-60 ~ -90 KV

詳細資料，請參閱各產品規格

For details, please refer to individual product specifications



塗特佳 T76 系列
TUTERGA series

編輯者Comiler: 王晉嘉

發行日期 Issued Date: 2024/4/2

Technical Data Sheet

操作程序Operation process:

- 1、請勿與其他產品混合使用。
Do not mix this product with other powder.
- 2、使用前應正確清潔基材。
The substrate should be correctly cleaned before use.
- 3、可以使用手動或自動靜電噴槍進行噴塗。
Spraying can be done using either manual or automatic electrostatic guns.
- 4、膜厚：所需的膜厚取決於工件的形狀以及指定膜厚。噴塗者需依實際狀況及經驗進行適當的調整。
Film thickness: The required application settings will depend upon the geometry of the object being coated as well as the specified film thickness. It is the responsibility of the applicator to make that appropriate adjustment
- 5、貯存環境：存放在通風、乾燥、陰涼的場所，避免陽光直射並遠離熱源。
Store in a ventilated, dry, cool place, avoid direct sunlight and away from heat sources.
- 6、烘烤條件：詳細資料，請參閱各產品規格
Curing condition: For details, please refer to individual product specifications.

包裝Packaging:

25Kg · 包裝材質：紙箱
25Kg , pack materials: Carton

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塗特佳 T76I 系列
TUTERGA T77I series

編輯者Comliler: 王晉嘉

發行日期 Issued Date: 2024/4/2

Technical Data Sheet

產品說明Product Description:

本系列產品使用耐候型的聚酯樹脂及耐候級顏料加工生產而成，其漆膜堅韌耐久、耐候性佳、角緣包覆性良好、耐黃變性佳、適用於摩擦帶電槍及電暈噴槍。且本系列產品符合RoHS相關規定，是室外漆的最佳選擇。

This series of products is made by the weather durable polyester resin and weather durable pigment. Its coating film is tough and has excellent weathering resistance, good edge coverage, excellent yellowing resistance. It is suitable for tribo gun and corona gun to use. This series of products complies with ROHS relevant regulation It is the best choice of the outdoor coating.

特性Feature & Benefits:

- 1、 耐候性良好。
Excellent weather resistance;
- 2、 機械性能佳。
Good mechanical properties
- 3、 耐黃變性佳。
Excellent yellowing resistance
- 4、 角緣覆蓋性良好。
Excellent edge coverage

應用Application :

塗特佳 T76I與T77I適用於需要高度防蝕性與耐候性等要求之物件的美觀保護塗裝。如戶外傢俱、汽車零件、 空調器、園藝器具、圍欄、護欄、農機殼備、防火門、鋁門窗框、遮陽板、露營器材等金屬製品。

T76I and T77I series is used for coating product which needs high anticorrosion & weather resistance, such as outdoor furniture, parts of the automobile, air- conditioner, horticultural tool, fence, farm equipment, fireproof door, aluminum window & door Frame, camping equipment, etc.

規格Technical Data:

項目 Items	測試標準 Test Standard
耐曲屈 Flexibility	Ø 6 mm 180°
耐衝擊 Impact	Ø 5/8±60inLb (Ø 1/4" ±50cmkg)
鉛筆硬度 Hardness	F 以上 Above F
密著性 Tape adhesion	100/100 不脫落 no peel off
耐候性 Weathering	QUV 3000 hrs
耐鹽霧 Salt Spray	5000小時以上 Above 5000 hrs

使用條件User Condition:

烘烤條件Curing condition	試產品而定
靜電值Static setting value	-60 ~ -90 KV

詳細資料，請參閱各產品規格

For details, please refer to individual product specifications





塗特佳 T76I 系列
TUTERGA T77I series

編輯者Comiler: 王晉嘉

發行日期 Issued Date: 2024/4/2

Technical Data Sheet

操作程序Operation process:

- 1、請勿與其他產品混合使用。
Do not mix this product with other powder.
- 2、使用前應正確清潔基材。
The substrate should be correctly cleaned before use.
- 3、可以使用手動或自動靜電噴槍進行噴塗。
Spraying can be done using either manual or automatic electrostatic guns.
- 4、膜厚：所需的膜厚取決於工件的形狀以及指定膜厚。噴塗者需依實際狀況及經驗進行適當的調整。
Film thickness: The required application settings will depend upon the geometry of the object being coated as well as the specified film thickness. It is the responsibility of the applicator to make that appropriate adjustment
- 5、貯存環境：存放在通風、乾燥、陰涼的場所，避免陽光直射並遠離熱源。
Store in a ventilated, dry, cool place, avoid direct sunlight and away from heat sources.
- 6、烘烤條件：詳細資料，請參閱各產品規格
Curing condition: For details, please refer to individual product specifications.

包裝Packaging:

25Kg · 包裝材質：紙箱
25Kg , pack materials: Carton

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塗特佳 T90 系列
TUTERGA series

編輯者Comliler: 王晉嘉

發行日期 Issued Date: 2024/4/2

Technical Data Sheet

產品說明Product Description:

本系列產品使用ARKEMA所生產的聚偏二氟乙烯(POLYVINYIDENE FLUORIDE) KYNAR PVDF氟碳樹脂及耐候級顏料加工生產而成最優越持久的氟碳粉體塗料，其漆膜堅韌耐久、耐候性、耐鹽霧、耐化學性特佳、角緣包覆性良好、耐黃變性佳。是室外建築用塗料的最佳選擇。

This series of products is made by the KYNAR PVDF fluorocarbon resin that produced by ARKEMA and weather durable pigment. The coating film of this series has an excellent advantage of durability, weather resistance, salt spray resistance, chemical-resistance, edge-coverage, and yellowing resistance. Therefore, it's the best choice for outdoor coating.

特性Feature & Benefits:

- 1、優異的耐候性及持久性。
Excellent weather resistance and durability.
- 2、機械性能佳。
Good mechanical properties
- 3、耐黃變性佳。
Excellent yellowing resistance
- 4、優異的耐蝕性。
Excellent corrosion resistance.
- 5、角緣覆蓋性良好。
Excellent edge coverage

應用Application:

鋁擠型材、鋁門窗、不銹鋼、鋁合金鋼板、鍍鋅鋼板之帷幕牆及構造物...等。

Aluminum materials, aluminum windows, stainless steel, aluminum alloy plate, galvanize plate valance curtain wall and structure...etc.

規格Technical Data:

項目 Items	測試標準 Test Standard
耐曲屈 Flexibility	Ø 6 mm 180°
耐衝擊 Impact	Ø 5/8" ±60inLb (Ø 1/4" ±50cmkg)
鉛筆硬度 Hardness	F以上 Above F
密著性 Tape adhesion	100/100 不脫落 no peel off
耐候性 Weathering	QUV Above 5000hrs
耐鹽霧 Salt Spray	5000小時以上 Above 5000hrs

使用條件User Condition:

烘烤條件Curing condition	試產品而定
靜電值Static setting value	-60 ~ -90 KV

詳細資料，請參閱各產品規格

For details, please refer to individual product specifications





塗特佳 T90 系列
TUTERGA series

編輯者Comliler: 王晉嘉

發行日期 Issued Date: 2024/4/2

Technical Data Sheet

操作程序Operation process:

- 1、請勿與其他產品混合使用。
Do not mix this product with other powder.
- 2、使用前應正確清潔基材。
The substrate should be correctly cleaned before use.
- 3、可以使用手動或自動靜電噴槍進行噴塗。
Spraying can be done using either manual or automatic electrostatic guns.
- 4、膜厚：所需的膜厚取決於工件的形狀以及指定膜厚。噴塗者需依實際狀況及經驗進行適當的調整。
Film thickness: The required application settings will depend upon the geometry of the object being coated as well as the specified film thickness. It is the responsibility of the applicator to make that appropriate adjustment
- 5、貯存環境：存放在通風、乾燥、陰涼的場所，避免陽光直射並遠離熱源。
Store in a ventilated, dry, cool place, avoid direct sunlight and away from heat sources.
- 6、烘烤條件：詳細資料，請參閱各產品規格
Curing condition: For details, please refer to individual product specifications.

包裝Packaging:

25Kg · 包裝材質：紙箱
25Kg , pack materials: Carton

保固政策:南寶樹脂化學有限公司(“賣方”)供貨給客戶的所有未開封塗料均符合賣方相關質量標準。由於表面處理，噴塗程序，固化程序和其他影響塗料性能的局部因素是賣方無法控制的；賣方對塗層不良不承擔任何責任，只能為證明有缺陷的塗料提供替換材料。客戶需確定本產品的適用性，並由此承擔與之有關的所有風險和責任，賣方對因使用本產品或由於使用本產品而直接或間接導致的任何傷害，損害或其他損失概不負責。產品的賣方對與產品及其應用有關的所有其他明示或暗示的擔保不作任何保證。WARRANTY POLICY: NAN PAO RESINS CHEMICAL Inc. ("Seller") certifies that all coatings delivered to Customer in an unopened factory filled containers meet all pertinent quality standards presented in Seller's current published literature. Since matters of surface preparation, application procedures, curing procedures and other local factors that affect coating performance are beyond Seller's control; Seller assumes no liability for coating failure other than to supply replacement material for coating material proven to be defective. The customer will determine the suitability of this product for its use and thereby assumes all risks and liabilities in connection therewith seller will not be liable for any injuries, damages, or other losses derived, directly or indirectly, from or as a consequence of Customer's use of the product. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, RELATING TO ITS PRODUCTS AND THEIR APPLICATION.

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類別	指標性案場名稱	施作年度
氟藝彩飾	台南市立-沙崙國中整修工程	2016~2017
氟藝彩飾	台南麻豆-喬美餐廳門面美化工程	2019
氟藝彩飾	南投愛上原鄉-二村三部落地圖導覽工程	2019
氟藝彩飾	白河商工-電梯增建工程	2019
木紋仿飾	新營文化演藝廣場美化工程	2017
PVDF 氟碳	台江文化中心-興建工程	2018
氟藝彩飾	嘉義公園-全區導覽牌工程	2022
氟藝彩飾	屏東市-民生路立體停車場興建工程	2019
PVDF 氟碳	台灣燈會-屏東大鵬灣主燈區設置工程	2019
PVDF 氟碳	新化體育公園周邊環境改善工程	2023
PVDF 氟碳	南投烏嘴潭人工湖工程計畫	2022
PVDF 氟碳	台南七股台電光電設置示範區工程	2020
石紋仿飾	台商招待會館外牆仿石紋鋼模工程	2018
PVDF 氟碳	嘉義布袋高跟鞋教堂周邊改善計畫工程	2016
PVDF 氟碳	北門水晶教堂人工湖周邊興建工程	2014
PVDF 氟碳	北門扇形鹽田地景及基礎設施工程	2023
PVDF 液體氟碳	高雄金屬工業研究發展中心興建工程	2020
PVDF 液體氟碳	南科台灣國際航電外觀改善整修工程	2024
PVDF 氟碳	官田西拉雅遊客中心興建工程	2022
立體木紋氟藝	嘉義周公館庭園別墅興建案	2024
氟藝彩飾	宜蘭-知名藝人藍波老師-海景別墅招待會館	2023

