

ES Color 簡介

濕式合成皮是一種仿真皮之連續多孔層之透氣性合成皮，柔軟、觸感佳富彈性，為一般加工業者及消費者所喜愛。

為提高濕式合成皮之美感與價值，本公司特別推薦ES Color，為濕式合成皮之著色劑。茲就本公司ES Color之基本色，逐一簡單介紹如後：

<p>1. 黃色系列 (Yellow Series)</p> <p>(A) 無機色料</p> <p>ES Yellow 7101：色相為中黃 ES Yellow 7102：色相為紅味</p> <p>以上二種均為鉻黃製品(Chrome Yellow)其成分大致為PbCrO₄, PbSO₄, PbCrO₄·PbO均為含鉛顏料。因此遇硫(S)會產生PbS而變黑，故在使用時應注意下游加工業的用途。 此種鉻黃製品，因比重較大，於粘度低之配合料中易生沈澱且鮮艷度較有機顏料略差。</p> <p>(B) 有機顏料</p> <p>ES Yellow 7103：色相為紅味鮮艷度佳 ES Yellow 7104：色相為綠味鮮艷度佳 ES Yellow 8B256：色相為綠味鮮艷度佳 ES Yellow 8B310：色相為紅味鮮艷度佳</p> <p>ES Yellow 7103、ES Yellow 7104屬雙偶氮(Disazo Yellow)產品，著色力強。 Yellow 8B256、ES Yellow 8B310為不含偶氮的產品，著色力強。 因比重較小，於粘度低之配料中不易沈澱，因此使用無機色料有沈澱困擾時，建議，改用有機色料。</p> <p>2. 紅色系列 (Red Series)</p> <p>ES Red 7408：色相微偏黃味，此色被廣泛使用 ES Red 7409：色相微藍味 ES Red 8B102：藍味，屬高級顏料 ES Red 8B035：色相介於ES Red 8B102及ES Bordeaux 8B505之間，屬高級原料。 ES Bordeaux 8B505：色相紫藍味，此色被廣泛使用</p> <p>一般濕式PU加工原料，需選用耐溶劑佳之顏料，避免造成底部及凝聚槽水洗槽之色污染。本紅色系列均為無色污染之高級紅色顏料。</p> <p>3. 棕色系列 (Brown Series)</p> <p>(A) 無機色料</p> <p>ES Brown 7509：色相黃味。屬氧化鐵(Fe₂O₃)之產品，耐熱，耐候均佳。因比重較大，其液狀油墨，靜置數日後會微有沈澱，但因其色相普受歡迎，故仍被大量採用。</p> <p>(B) 有機顏料</p> <p>DVP Brown 7600：為高級合成顏料製品，其著色力比無機棕色高，除耐熱，耐候性佳，即使在低黏度配料中亦不易沈澱。</p> <p>4. 綠色系列 (Green Series)</p> <p>ES Green 7802帶黃味，為酞花青綠(Phthalocyanine Green)其性質與Phthalocyanine Blue 相當，耐候，耐熱均優。</p>	<p>5. 藍色系列 (Blue Series)</p> <p>ES Blue 7441：屬偏紅味色相，著色力佳。 ES Blue 7643：屬一般色相。 ES Blue 8B037：色相最鮮艷，著色力特佳，此色最適用於要求高艷度之產品。</p> <p>藍色主要原料為酞花青藍(Phthalocyanine Blue)製造，耐熱，耐候性均優。</p> <p>6. 紫色系列 (Violet Series)</p> <p>ES Violet 7601：微偏藍味色相 ES Violet 8B682：微偏紅味色相</p> <p>紫色為高級合成顏料製品。耐光性，耐熱性均優，耐溶劑性略差，可能會有輕微的水污染。</p> <p>7. 白色系列 (White Series)</p> <p>ES White 7807：一般白色色膏。 ES White 8B435：特白級白色色膏。 ES White 8B679：耐黃變型白色色膏。</p> <p>白色產品採用R型品之二氧化鈦(TiO₂)製造，白度光澤佳。</p> <p>8. 黑色系列 (Black Series)</p> <p>ES Black 8B141：適用於超軟質的PU樹脂，尤其在Suede加工，黑度更佳 ES Black 8B407A：高濃度黑色色膏。 ES Black 8B431：高週波製程用色膏。 ES Black 8B628：含浸用黑色色膏。</p> <p>黑色色料碳黑(Carbon Black)製造。</p> <p>9. 耐水解系列 (ES 8WXXX)</p> <p>以耐水解PU樹脂製作的濕式PU用色膏。</p>
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SUMMARY INTRODUCTION OF ES COLOR

Wet-process (coagulation-process) PU synthetic leather is imitation leather with continuous porous layer and high moisture permeability. Because of its soft, flexible, and good sense of touch, it is quite popular with the industrial traders and customers.

In order to promote the beauty and value of the wet-type synthetic leather, we recommend the ES color as the coloring agent for wet-type synthetic leather. Presented below is the summary introduction of various basic color of ES color:

<p>1. Yellow Series</p> <p>(A) Inorganic Color</p> <p>ES Yellow 7101: Medium yellow ES Yellow 7102: Crimson</p> <p>The above three are all products of chrome yellow with the ingredients of PbCrO₄, PbSO₄, PbCrO₄·PbO, which are all lead pigments. Therefore, when they meet with S, PbS will be generated and turned black. So, attention should be paid to the down stream industry when they are in use.</p> <p>Due to high specific gravity, this chrome yellow product is easy to create precipitation and becomes less bright than the organic pigment when mixed with compound of low viscosity.</p> <p>(B) Organic Color</p> <p>ES Yellow 7103: Reddish with good brightness ES Yellow 7104: Greenish with good brightness ES Yellow 8B256: Greenish with good brightness ES Yellow 8B310: Reddish with good brightness</p> <p>ES Yellow 7103 ∨ ES Yellow 7104 are disazo yellow products high Tinting Strength. ES Yellow 8B256 ∨ ES Yellow 8B310 are disazo-free Yellow products with high Tinting Strength.</p> <p>Due to low specific gravity, this product is not easy to create precipitation when mixed with compound of low viscosity. Therefore, if precipitation dose happen in using inorganic color, it is recommended to use organic color.</p> <p>2. Red Series</p> <p>ES Red 7408: Slight yellowish, which is widely used. ES Red 7409: Slight bluish. ES Red 8B102: Bluish, which is high class pigment. ES Red 8B035: Hue is between ES Red 8B102 and ES Bordeaux 8B505. Which are high class pigment. ES Bordeaux 8B505: Bluish violet, which is widely used.</p> <p>For process of wet-type PU in general, pigment with good resistance to solvent should be chosen thus preventing the color pollution on the base cloth and in the condensation tank. This red series is the high class red pigment without color pollution.</p> <p>3. Brown Series</p> <p>(A) Inorganic color</p> <p>ES Brown 7509: Hue is yellowish. are the product of forged oxidized iron with excellent heat and weather resistance. Due to its high specific</p>	<p>gravity, it is easy to create precipitation when mixed with compound of low viscosity.</p> <p>(B) Organic color</p> <p>ES Brown 7600: it is a high class synthetic pigment; its ability in color application is higher than that of the inorganic brown. In addition to its excellent heat and weather resistance, it will not easy to create precipitation even at the mixture with compound of low viscosity.</p> <p>4. Green Series</p> <p>ES Green 7802 is phthalocyanine Green of which the property corresponds to that of phthalocyanine blue. It has excellent heat and weather resistance. Hue of ES 7802 Green is yellowish.</p> <p>5. Blue Series</p> <p>ES Blue 7441: Reddish and high Tinting Strength. ES Blue 7643: General hue. ES Blue 8B037: Brightest with excellent tinting Strength. The major color of blue is made from phthalocyanine Blue with excellent heat and weather resistance.</p> <p>6. Violet Series</p> <p>ES Violet 7601: Hue is bluish. ES Violet 8B682: Hue is reddish.</p> <p>Violet is a high class synthetic pigment with excellent light and heat resistance. However, it has poor solvent resistance and therefore it might create slight water pollution.</p> <p>7. White Series</p> <p>ES White 7807: General hue. ES White 8B435: Extra white. ES White 8B679: Non-yellowing product.</p> <p>White products are made from R-type TiO₂ and have good whiteness and gloss.</p> <p>8. Black Series</p> <p>ES Black 8B141: Suitable for the softest PU resin. Excellent blackness when processed on Suede. ES Black 8B407A: High concentration product. ES Black 8B431: For high frequency welding process. ES Black 8B628: For dipping process.</p> <p>Black products are made from carbon black.</p> <p>9. Hydrolysis-resistant Series (ES 8WXXX)</p> <p>Made of Hydrolysis-resistant PU resin.</p>
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SUMMARY INTRODUCTION OF ES COLOR

I. Introduction

Wet-type synthetic leather is a kind of product to imitate the continual porous and air permeable character of genuine leather. Its soft, flexible and excellent senses of touching have won the hearts from the manufacturers and consumers.

In order to promote the beauty and value of the wet-type synthetic leather, this company recommends the ES color as the coloring agent for wet-type synthetic leather.

II. Characteristic

1. Easy in color matching.
2. Excellent in solubility and improvable in operation efficiency thereby.
3. Stable in quality.
4. Clear and brilliant shade.
5. Stable in viscosity.
6. High transparence.

III. Data of color sheet

	Full Shade	Tint Shade	
		Color, Black	White
PU Compound	100	100	100
ES Color	10	2.0	8.0
ES White 7807		8.0	--
ES Black 8B141		--	2.0

PU Compound → PU Resin : DMF = 1 : 1

Sheeting Data

Casting Thickness 1.00~1.30mm → Drying Temperature Drying Oven 120°C

IV. Test Method

1. Light Resistance

The Test Sheet is Carried out of specified period in a Fade - o - meter Assessments were made using the 1- to - 8 Blue Scale so as to degree of their fading and discoloration.

Blue Scale for Light Resistance

Rating	Blue Scale	Fade - O - meter Full Exposure
8	Outstanding	400 hours
7	Excellent	200 hours
6	Very good	100 hours
5	Good	50 hours
4	Fair	25 hours
3	Moderate	12 hours
2	Poor	6 hours
1	Very poor	3 hours

2. DMF Fastness

Adding 50 grams of compounds into 500 grams of water, Separate after 60 minutes. The pollution grade of DMF was judged by the extent of staining of the water and assessed on 1 - to - 5 scale.

3. Chemical Resistance

The color shade was left in a solution for 60 minutes. The change of shade is assessed on a 1 - to - 5 scale.

Rating	Shade of test sample	Chemical Resistance
5	Unchanged	Very good
4	Trance change	Good
3	Slightly change	Fair
2	Considerably change	Moderate
1	Severely change	Poor

ES Color 化性及物性表
Chemical and Physical Resistance Table






ES Color	Light Fastness		DMF Fastness	Chemical Resistance	
	Full Shade	Tint Shade		HCl 3N	NaOH 10%
Yellow 7101	7	6	5	4	3
Yellow 7102	7	6	5	4	3
Yellow 7103	7	7	4-5	5	5
Yellow 7104	7	6	4-5	5	5
Yellow 8B256	7	7	4-5	4	5
Yellow 8B310	7	7	4-5	4	4
Red 7408	7	6	5	4	3
Red 7409	7	6	5	4	5
Red 8B102	7	7	4-5	4	3
Magenta 8B035	7	7	5	5	5
Magenta 8B505	7	6	4	5	5
Brown 7509	8	7	5	5	5
Brown 7600	7	6	5	5	5
Green 7802	8	7	5	5	5
Blue 7441	8	8	4-5	5	5
Blue 7643	8	8	5	5	5
Blue 8B037B	8	8	5	5	5
Violet 7601	7	7	4	5	5
Violet 8B682	8	8	4	5	5
White 7807	6	6	5	5	5
White 8B435	6	6	5	5	5
White 8B679	6	6	5	5	5
Black 8B141	8	8	5	5	5
Black 8B407A	8	8	5	5	5
Black 8B431	8	8	5	5	5
Black 8B628	8	8	5	5	5

ES Color 8WXXX	Light Fastness		DMF Fastness	Chemical Resistance	
	Full Shade	Tint Shade		HCl 3N	NaOH 10%
Yellow 8W012	7	6	5	4	3
Yellow 8W016	7	7	4-5	5	5
Red 8W017	7	6	5	4	3
Red 8W033	7	7	4-5	4	3
Bordeaux 8W019	7	6	4	5	5
Brown 8W018	8	7	5	5	5
Blue 8W032	6	6	5	5	5
Green 8W020	8	7	5	5	5
White 8W021	6	6	5	5	5
Black 8W015	8	8	5	5	5

以上所列物性數據為典型試驗數據，不做產品規格及保證。尤其著色量低於0.1%時客戶必須自行測試所需物性。

The above data and results are based on controlled or lab work and must be confirmed by Buyer by testing for the intended conditions of use.

ES Yellow 7101 (PY-34)		ES Red 8B102 (PV-19)	
ES Yellow 7102 (PY-34)		ES Magenta 8B035 (PV-19)	
ES Yellow 7103 (PY-83)		ES Bordeaux 8B505 (PV-19)	
ES Yellow 7104 (PY-81)		ES Brown 7509 (PR-104)	
ES Yellow 8B256 (PY-138)		ES Brown 7600 (PBr-25)	
ES Yellow 8B310 (PY-139)		ES Green 7802 (PG-7)	
ES Red 7408 (PR-208)		ES Blue 7441 (PB-15 : 3)	
ES Red 7409 (PR-185)		ES Blue 7643 (PB-15 : 3)	

ES Blue 8B037B (PB-15 : 4)	ES Black 8B431 (PBk-7)
	
ES Violet 7601 (PV-23)	ES Black 8B628 (PBk-7)
	
ES Violet 8B682 (PV-23)	
	
ES White 7807 (PW-6)	
	
ES White 8B435 (PW-6)	
	
ES White 8B679 (PW-6)	
	
ES Black 8B141 (PBk-7)	
	
ES Black 8B407A (PBk-7)	
	

耐水解系列 Hydrolysis-resistant Series (ES 8WXXX)

ES Yellow 8W012 (PY-42)	ES White 8W021 (PW-6)
	
ES Yellow 8W016 (PY-83)	ES Black 8W015 (PBk-7)
	
ES Red 8W017 (PR-208)	
	
ES Red 8W033 (PR-122)	
	
ES Bordeaux 8W019 (PV-32)	
	
ES Brown 8W018 (PR-104)	
	
ES Blue 8W032 (PB-15 : 4)	
	
ES Green 8W020 (PG-7)	
	