

## UV 上光常見故障及排除方法

### A 亮度不好，光澤度差

#### A 故障現象

- 1 光油得黏度小，塗層太薄。
- 2 紙張粗糙，平滑度差，吸收性過強。
- 3 塗布輥供油量少。
- 4 乙醇等非反應型溶劑稀釋過度。
- 5 印刷品表面油墨不乾。
- 6 油墨排斥光油，造成發花和不均。
- 7.UV 上光油質量差，光度不好。
- 8.溫度低，濕度高。
- 9.光源老化，光油固化不徹底。
- 10.UV 光油中混入雜質，不乾淨。

#### B..排除方法

- 1.適當提高 UV 光油得黏度，增加塗布量，在不影響塗布流平均勻光滑得情況喜愛，盡可能稍塗厚一些。

## THE ONLY COMMON TROUBLE AND METHOD OF GETTING RID OF ON UV

### A.The luminance is not good, the glossiness is bad

#### A.Trouble phenomenon

- 1.The mere oil has the viscosity small, the coating is too thin .
- 2.The paper is coarse , level and smooth degree is bad, bsorbability is too strong.
- 3.There is few amount of oil supported of coating rollers.
- 4.The reacting type solvents , such as ethanol ,etc. dilute excessivly.
- 5.Surface printing ink of the printed matter no the universe.
- 6.The printing ink repels all oil, cause and grow dim and uneven.
- 7.Mere oil quality is poor on UV, the luminosity is not good.
- 8.Temperature is low, the humidity is high.
- 9.The light source wears out , mere oil solidification is not thorough.
- 10.Sneak into the impurity in the mere oil of UV, not clean.

#### B. Get rid of the method

- 1.Proper to improve UV mere oil have viscosity , person who increases coating , influence coating it flows average and even to be so smooth that situation like, scribble a little thicker slightly as much as possible .

- 2.紙質太粗,應塗布一層水性底膠或溶劑型底膠
  - 3.UV 上光前油墨充分乾燥。
  - 4.如因油墨原因,造成光油排斥,發花或影響光油與油墨得附著力,應先上一層底膠。
  - 5.必須使 UV 光油充分光固化,如發現光源老化應及時更換燈管。
  - 6.應盡量減少非反應型稀釋劑(例如乙醇、乙酸乙酯、甲苯等)的加入,以免影響 UV 光油的徹底固化。
  - 7.選用流平性好、光澤度高的 UV 光油。
  - 8.表面發黏,殘留氣味大
- 2.The paper quality is too thick, in conformity with swimming skill of a floor bottom glue of coating or solvent type bottom glue.
  - 3.The printing ink is abundant and dry before being mere on UV.
  - 4.For instance because of printing ink , cause all oil to repel , grow dim or influence all oil and printing ink to have adhesive force , should be gluey in the previous layer of bottom first.
  - 5.Must make UV mere oil abundant mere solidification , find light source is it should change light in charge of in time to wear out.
  - 6.Should try one's best not to reduce non- the joining of the reacting type diluent (for example ethanol , sour second ester of second , toluene ,etc. ) , so as not to influence the solidification completely of the mere oil of UV.
  - 7.Select the flat good mere oil of UV of high glossiness for use and flow.
  - 8.The surface is sent and stuck , it is great to remain the smell

## A.故障原因

- 10.紫外光強度不夠，燈管老化，未能充分固化乾燥。
- 11.非反應型稀釋劑（乙醇等）加入過度。影響UV光油的徹底固化，特別在溫度低，濕度高的情況下，這種影響更為嚴重。
- 12.上光油塗布過厚或嚴重不均勻。
- 13.上光機速度過快，UV光油的固化乾燥速度不適應。
- 14.UV光油中的活性稀釋劑質量差，氣味大，光引發劑不合適，造成殘留氣味大。
- 15.光油存放時間過長，造成容器氣味聚集。
- 16.印刷油墨不乾，影響UV光油徹底固化。

## B.排除方法

- 17.確保UV光油中的充分徹底固化，是避免表面發黏，減少。
- 18.光油殘留氣味的最有效途徑。

## A. Trouble reason

- 10.Purple other luminous intensity is not enough, the light is in charge of wearing out , solidification is dry to fail to be abundant.
- 11.Not the reacting type diluent (ethanol ,etc. ) is joined excessively. Influence the solidification completely of the mere oil of UV, it is especially low in temperature, under the situation high in humidity, this kind of influence is more serious.
- 12.It is too thick or not even seriously to have all oil coating.
- 13.The glazing machine is too fast in speed, the dry speed of solidification of the mere oil of UV does not suit .
- 14.The active diluent quality in the mere oil of UV is poor, the smell is big, the mere initiator is improper, cause the smell of remaining to be great.
- 15.The mere length of time of oil is too long, cause the smell of the container to assemble .
- 16.Printing-ink the universe, influence UV mere solidification completely of oil.

## B.Get rid of the method

- 17.Guarantee the abundant solidification completely in the mere oil of UV, prevent the surface from being sent and sticking , reduce
- 18.The mere oil remains effective way the most of the smell .

19.要即時更換燈管。紫外燈管一般使用壽命為1000h 左右，頻繁轉動會大大縮短使用壽命，紫外光固化取決于高壓汞燈發射的有效紫外波長，老化即意味著有效紫外波長的減退，所以不能燈管不亮或壞了才更換。

20.要盡量減少非反應型稀釋劑的使用，適當提高固化過程的溫度，有助於非反應型稀釋劑的揮發，減少對光固化的干擾。

21.選擇固化乾燥速度快 氣味小的UV 光油品種

22.必須時可以加入一定量的 UV 光油固化促進劑，以加速 UV 光油徹底固化乾燥，加入量一般為 2 % - 5 %。

23.UV 上光後，紙張易折裂

#### A.故障現象

25.紙張本身纖維性質較脆，易折裂，特別是較厚的紙張或紙板。

26.UV 光油及底膠塗布過厚。

19.Change the light to manage immediately. The purple other light is in charge of general service life for about 1000h, frequently rotating will shorten service life greatly, ultraviolet ray solidification depends on the effective purple other wavelength that the high-pressure mercury light radiates, wear out namely mean to fail effective purple other wavelength, so can't light in charge of only broken to change.

20.Try one's best not to reduce the use of the reacting type diluent , improve the temperature of the solidification course properly, do not contribute to the volatilizing of the reacting type diluent, reduce the interference to mere solidification.

21.UV mere variety of oil of choosing solidification to be dry and fast with little smell .

22.Must when can join UV of a certain amount it is mere oil solidification promoter, in order to accelerate UV mere solidification completely of oil drily, the joining amount is generally 2 - 5.

23.After being mere on UV, the paper is easy to roll over and split

#### A.Trouble phenomenon

25.The nature of linking is relatively fragile that the paper itself is signed , easy to convert into splitting, especially thicker paper or the cardboard .

26.The mere oil of UV and bottom glue coating are too thick.

- 27. UV 光油性質太硬，柔軟性不足。
- 28. 紙張含水量太少，過於乾燥。
- 29. 光源過強，紫外光固化曝光過度。
  
- 30. 壓痕、模切等候加工工藝不匹配。

## B. 排除方法

- 32. 選用韌性較好、不易折裂的紙張。
- 33. 減少 UV 光油塗布量，降低塗布厚度。
- 34. 選擇柔軟性較好的 UV 光油，也可以在 UV 光油中少量加入增塑劑和柔韌助劑。
- 35. 在保證光油固化的基礎上，盡量避免紫外光過度曝光和烘烤。
- 36. 採用有效措施，改善印刷品質的含水量，必要時可以採用噴濕、過水等措施。
- 37. 調整後加工工藝，使其與厚紙印刷品加工相適應。

- 27. UV light oil nature is too hard , the flexibility is insufficient.
- 28. The paper is too less in water content, too dry.
- 29. The light source is too strong, ultraviolet ray solidification is over-exposed.
  
- 30. Press the mark , mould and cut and wait for processing technology mismatch .

## B. Get rid of the method

- 32. It is better , difficult to convert into the paper that split to select toughness for use.
- 33. Reduce UV mere coating amount of oil, reduce the thickness of coatings.
- 34. Choose the mere oil of UV with better flexibility, can put into plasticizer and pliable and tough auxiliary on a small quantity in the mere oil of UV too.
- 35. On the basis of guaranteeing all oil solidification , try one's best to prevent the ultraviolet ray from being exposed and toasting excessively.
- 36. Adopt the effective measure, improve the water content of printing quality, can adopt and gush out wetly , cross the measures , such as water ,etc. in case of necessity.
- 37. The processing technology, make it processed and suitable for with thick paper printed matter after adjusting.

38.油墨與光油發生排斥，光油塗不上或發花塗不勻。

### A.故障原因

40.油墨不乾和油墨故障是造成上述現象的最主要原因。

41.油墨中加入燥油、調墨油或撒黏劑過多，或加入硅油等防粘助劑以及油墨表面晶化等，都會形成與UV光油排斥，造成塗不上或塗不勻，出現發花、麻點、針孔等現象。

42.油墨表面噴粉後黏附粉墨太多。

43.UV光油黏度小，塗層太薄。

44.UV光油表面張力大，濕潤、流平、親油能力差。

### B.排除方法

46.需並行UV上光的產品，應在印刷前做同一考

38.Printing ink and mere oil are repelled , the mere oil can not spread or grows dim and can not scribble evenly.

### A.Trouble reason

40.Main reason not that the universe and printing ink trouble cause above-mentioned phenomena of the printing ink .

41.Put into the dry oil , adjust the black oil or spreading and sticking too much pharmaceutical in the printing ink , or put into silicon oil ,etc. and defend and glue auxiliary and printing ink surface to melt etc. brilliantly , will form and repel with mere oil of UV , causes and can not scribble evenly or not , present growing dim , rough some , needle hole.

42.Stick black and too much powder after the printing ink surface gushes out the powder.

43.The mere viscosity of oil of UV is small, the coating is too thin .

44.UV mere oil surface tension is great , moist , flow and flat , kiss oil ability badly.

### B.Get rid of the method

46.The products needing to run side by side on UV to be mere, should

慮，避免使用與 UV 光油相斥的油墨助劑，防止蠟類、硅類等防黏材料游離遷移至油墨表面。

47.上光前印刷油墨充分乾燥并清除粉墨。

48.可使用親油性較好的底膠打底，防止油墨排斥，提高 UV 光油與油墨的附著力。

49.用紗布擦去遷移至油墨表面的防黏層往往也是一種實用有效的方法，但要注意最好邊處理邊上光，不宜重新堆積。

50.選用潤濕親油能力較好 UV 光油，並使 UV 光油適當塗布厚一些。

51.採用 UV 油墨、水性油墨和溶劑型油墨的印刷品不容易發生上述故障。

#### A.上光後電化鋁燙印不上 故障原因

53.UV 光油中含硅、蠟等防黏成份較多，影響電化鋁附著。

consider the samly before printing , the printing ink auxiliary avoiding use and mere oil of UV and repelling each other, prevent wax , silicons ,etc. from defending and sticking materials to dissociate and move to the printing ink surface.

47.The printing-ink is abundant and dry and removed the powder black before having merly.

48.Can use and kiss better bottom glue oily and feel secure , prevent the printing ink from repelling, improve the mere oil of UV and adhesive force of the printing ink .

49.Wipe and move to the superficial dyke of printing ink to stick story with the gauze often too "çPlant the practical and effective method , but should pay attention to dealing with the edge light, should not pile up again .

50.Select for use and wet and kiss oil ability better mere oil of UV, and make the mere right cloth of Dangtu of oil of UV a little thicker.

51.Adopt UV printing ink , swimming skill printing ink and solvent type printed matter of printing ink easy to take place above-mentioned trouble.

#### A.The electricity aluminium is too hot to print after having merly Trouble reason

53.Include silicon , wax ,etc. to defend and stick more compositionses , influence the electricity aluminium to adhere to in

- 54.電化鋁選用的型號不合適。
- 55.燙溫度、壓力不合適。
- 56.油墨表面不乾，影響光油底層固化。

## B.排除方法

- 57.選用可燙電化鋁的專用 UV 光油。
- 58.選用可燙印塑料的電化鋁。
- 59.相應調整燙印工藝的溫度壓力。
- 60.對以上好光的產品，可以用少量乙醇擦拭去已遷移至光油塗層表面的有機硅或蠟的微量成份，然後再進行燙金。
- 61.、上光不勻，有條紋、橘皮、麻點等現象

## A.故障原因

- 63.UV 光油黏度過高，流平性差。
- 64.塗布量太大。
- 65.上光機膠輥與壓印滾筒間的壓力不均勻。

the mere oil of UV.

- 54.The type that the electricity aluminium selects for use is improper.
- 55.It is improper to scald the temperature , pressure.
- 56.Printing ink surface the universe, influence all solidification of ground floor of oil.

## B.Get rid of the method

- 57.Select special-purpose mere oil of UV that can scald the electricity aluminium for use.
- 58.Selecting for use can print the plastic electricity aluminium hotly .
- 59.Adjust the hot temperature pressure of printing the craft correspondingly .
- 60.To the above very mere products, can wipe and wipe a small amount of ethanol away and already move , then it is gilt to carry on.
- 61.Sixth, have the light not even, have stripes , tangerine peel , a bit rougher

## A.Trouble reason

- 63.The mere viscosity of oil of UV is too high, flat difference flows.
- 64.The coating amount is too large.
- 65.The glue roller of the glazing machine and pressure impressed

- 66.膠盤或盛 UV 光油的容器不乾淨、有雜質、粉墨及沉積物混入光油中。  
67.印刷油墨表面粉墨太多。

### 排除方法

- 69.降低光油黏度，減少塗布量。  
70.調整上光機壓力，使之均勻一致。  
71.如光油中有雜質，應徹底清洗膠盤及容器，將 UV 光油重新過濾後使用。  
72.印刷品表面要充分乾燥並清除粉墨。

### 耐磨和耐刮擦性差 故障原因

- 74.光油光固化不徹底，未能形成網狀結構的堅韌塗層。  
75.油墨未能充分乾燥，影響 UV 光油的徹底固化

among the cylinders are not even .

- 66.Glue one or container which holds the mere oil of UV is not clean, have impurity , powder China ink and sediment to sneak into all oil.  
67.There is black and too much printing-ink surface powder.

### Get rid of the method

- 69.Reduce all viscosity of oil, reduce the coating amount.  
70.Adjust the pressure of the glazing machine , make it even and unanimous.  
71.If there is impurity in the mere oil, should wash glue one and container completely , use the mere oil of UV after being filtered again.  
72.The printed matter surface will be abundant and dry and removes the powder black .

### wear-resisting with able to bear swiping difference Trouble reason

- 74.Only glossy solidification does not fail to form the toughness coating of the netted structure completely.  
75.The printing ink fails to be abundant to be dry, influence the solidification completely of the mere oil of UV.

76.機速過快，影響 UV 光油的徹底固化。

77.UV 光油中加入乙醇等非反應性稀釋劑太多，影響 UV 光油的徹底固化。

### 排除方法

79.確保 UV 光油的充分光固化，是 UV 光油耐磨和耐刮的基本條件。

80.印刷品表面充分乾燥。

81.選用硬度較高、韌性較好的 UV 光油。

82.光油中可加入少量聚乙稀臘、有機改性硅氧烷等助劑，提高滑爽耐磨性能。

### UV 光油變調，有凝膠現象 故障原因

84.UV 光油存儲時間過長，超過安全保質期，并

76.The machine is too fast in speed, influence the solidification completely of the mere oil of UV.

77.It is not that there are too many responsivity diluents to put into ethanol ,etc. in the mere oil of UV, influence the solidification completely of the mere oil of UV.

### Get rid of the method

79.Guarantee the abundant mere solidification of the mere oil of UV, it is that the mere oil of UV is wear-resisting with able to bear the primary condition shaved.

80.The printed matter surface is abundant and dry.

81.Select the mere oil of UV higher in hardness , with better toughness for use.

82.Can be added and gathered the rare cured , modifies auxiliary , such as silicon oxygen and alkane ,etc. organically of second on a small quantity in the mere oil, improve and slip comfortable wear-resisting performance .

### the mere oil of UV modifies tone, there are gel phenomena Trouble reason

84.It is too long that the mere oil of UV stores time, exceed security quality guarantee period, and start to hand in the phenomenon of

始出現交聯現象。

85.儲存條件不合適，儲存溫度偏高。

86.UV 光油存儲放不能嚴格避光。

87.UV 光油中光引發劑加入過量。

### 排除方法

89.UV 光油應嚴格避光避熱存儲，一般存儲溫度以 5 -25 為宜。

90.UV 光油一般安全保質存儲期為 6 個月，如果保存得好，目前一般有效期均可大大長。

91.如產品尚未完成交聯，可以過濾後適當稀釋使用。

### UV 上光塗層泛黃 故障原因

93.UV 光油材料不純，本身顏色深。

94.光油中使用得光引發劑有泛黃現象。

uniting .

85.It is improper to store the condition , store temperature on the high side.

86.It can't be strict and photophobic that the mere oil of UV is stored and put.

87.The mere initiator is joined excessivly in the mere oil of UV.

### Get rid of the method

89.The mere oil of UV should avoid hot memory strictly and photophobically , generally stores temperature and suitable for 5 degrees Centigrade - 25 degrees Centigrade.

90.It is 6 months since the mere oil of UV generally guarantees the quality and stores one safely, if keep well, the general term of validity is long greatly at present.

91.If the products have not been finished handing in and uniting yet, can dilute properly and use after filtering .

### the mere coating is yellowing on UV Trouble reason

93.The mere oil material of UV is impure, one's own color is dark.

94.Have yellowing phenomena to use the initiator merly in the mere oil.

95.UV 光油存放時間過長，顏色變深。

96.光源強、固化時間長，受紫外光照射過度。

### 排除方法

97.選用透明顏色的 UV 上光油。

98.避免容易泛黃變深的光引發劑。

99.調節光源急機速，避免過度曝光。

100.必要時可補加少量增白劑。

### 在非吸收材料表面附著不好 故障原因

102.非吸收性承印材料（例如 PE、PET、BOPP 等）大部分屬非級性材料，表面浸潤能力差，如未並行表面電擊處理，則較難黏和附著。

103.UV 光油的配方組成不合適，收縮率大，柔韌性、附著力及底材浸潤能力差。

95.The mere length of time of oil of UV is too long, the color is deepened.

96.The light source is strong, solidification time is long, it is excessive to shine by the ultraviolet ray.

### Get rid of the method

97.Select the mere oil on UV of the transparent color for use.

98.Avoid the apt yellowing mere initiator that deepened.

99.Regulate the urgent machine speed of the light source, prevent from and is exposed excessively.

100.Can add a small amount of brightening agent in case of necessity.

### in adhere to kind Trouble reason

102.It is not that the absorbability bears and prints the material (for example PE , PET , BOPP ,etc. ) the majority does not belong to one grade of sex material , the surface soaks into ability badly, if has not run side by side on the surface and shocked by electricity and dealt with, more difficult to stick and adhere to .

103.The prescription of the mere oil of UV makes up improperly, the shrinking rate is great, flexibility , adhesive force and bottom material soak into ability badly.

104.光源強度不足，未能徹底固化。

#### 排除方法

105.充分徹底的光固化，特別是底層浸潤和固化，是黏合附著的先決條件。

106.聚稀氫材料表面上光前需並行電擊處理，使其表面張力達到 38~40 左右 ( 380~400 $\mu\text{m}/\text{cm}$  )。

107.需選購或配制專用 UV 上光油，不能使用普通的紙印刷品上光油，光油中應增加聚氨基酯丙稀酸氯化聚酯丙稀酸酯?等成分。

#### UV 光油耐水性差 故障原因

109.UV 光油光固化乾燥不徹底是最主要原因。

110.印刷品表面油墨不乾，影響 UV 光能底層固化，特別是水性油墨乾燥不好，影響更為嚴重。

111.UV 光油中含有乙醇等親水性非反應性稀釋

104.The light source is insufficient in intensity, the solidification that fail to be thorough.

#### Get rid of the method

105.Abundant and thorough mere solidification, especially the ground floor is soaked into and solidification, bind the precondition adhered to.

106.Need to run side by side and shock by electricity dealing with before gathering the rare light on the surface of hydrogen material , make its surface tension up to about (38000 $\mu\text{m}/\text{cm}$  ) 380.

107.Need to choose or compound the mere oil on special-purpose UV, can't use ordinary paper mere oil at the printed matter, mere oil should increase polyurethane third rare sour chlorine polyester third rare sour ester? Wait for the composition .

#### the mere oil of UV is able to bear the swimming skill badly Trouble reason

109.It is not a main reason completely that UV only glossy solidification is dry.

110.Printed matter surface printing ink the universe, influence UV light energy ground floor solidification, especially swimming skill printing ink dry and bad, influence more serious.

111.It is not that a responsivity diluent is excessive to contain

劑過量，光固化過程未能完全揮發，殘留在固化塗層中，影響耐水性。

### 排除方法

113.上光前印刷品表面油墨需充分乾燥，特別是水性油墨。

114.必須保證 UV 光油充分固化，注意檢查光源是否老化，機速是否太快及乙醇是否加入過多等，並及時進行調整。

115.必要時可以更換固化速度快、抗水性強的 UV 光油。

### 上光後紙張發暗變深 故障原因

116.紙張粗糙、吸收滲透性太強，特別是背面顏色較深的灰底白板紙等，由于 UV 光油的浸潤和滲透，背面的顏色會泛至表面，形成紙張變色變暗。

117.UV 光油與揮發性光油(例如水性光油及溶劑性光油)的乾燥原理性質不同，由于 UV 光油在

ethanol ,etc. to kiss the swimming skill in the mere oil of UV, the mere solidification course fails to totally volatilize, remain it in the solidification coating, influence and able to bear the swimming skill.

### Get rid of the method

113.The surface printing ink of the printed matter needs to be abundant to be dry before going to all, especially the printing ink of the swimming skill.

114.Must guarantee UV only glossy abundant solidification , pay attention to checking whether the light source wears out , whether the speed of the machine is too quick and the ethanol is joined too much etc., and adjust in time.

115.Can change the solidification with fast tempo , mere oil of UV with strong water-resistance in case of necessity.

### the paper shades and deepens after have all Trouble reason

116.The paper is coarse , absorb the permeability too strongly, especially darker gray white paperboard of bottom of the back color ,etc., because of the infiltration and infiltration of the mere oil of UV, the color of the back will be suffused with to the surface, will form the paper and become dark to change color.

117.The mere oil of UV and dry principle nature of the mere oil of

未見紫外光前不能成膜乾燥，所以其浸潤滲透能力要比其他類型的光油強得多。

### 排除方法

119.特別粗糙疏松的紙張、紙板不合適直接並行UV上光，可以選用其他上光方式。

120.背面顏色較深的灰底白板紙等，如需進行UV上光，應先在表面塗布一次水性底膠或溶劑型底膠，填充紙張纖維毛孔，以減少吸收滲透，防止泛色。

volatility (such as mere oil of swimming skill and solvent mere oil ) are different, because it is dry that the mere oil of UV can't become membrane before not seeing the ultraviolet ray , it soaks into ability of permeating and should be much better than light oil of other types.

### Get rid of the method

119.Very coarse loose paper , cardboard are improper the light on UV runs side by side directly, can select other ways of having all for use .

120.Darker gray white paperboard of bottom of the back color ,etc., if need to carry on the light on UV, should be in surface coating once the glue or solvent type bottom glue of swimming skill bottom first, pack the fibre pore of the paper , in order to reduce and absorb permeating , prevent being suffused with the color.