

**T200
M series**



(Low Halogen)
Eco-friendly design

No added
"cyclohexanone,"
"aromatic hydrocarbon
solvent," nor "phthalate"

Color range:

This series contains 12 reference colors, which can be mixed with each other to produce a wide range of colors. The standard commonly used in the market is Pantone.

Ink characteristics:

It is a high gloss, physically dry and chemically active transfer/screen printing ink with good mechanical and chemical resistance and good flexibility. T200 series inks can be used for packaging materials or commodities that do not touch the surface of food under proper and professional printing.

The materials used comply with the regulations and restrictions of EEC Regulation EN71 (Toy Safety), Article 3 (Migration of Specific Elements) passed in December 1994.

	White T200-1000		Silver T200-4000		Violet T200-5000
	Opaque White T200-1001		Light Yellow T200-2000		Blue T200-5001
	Black T200-9000		Yellow T200-2001		Green T200-6000
	Opaque Black T200-9002		Orange T200-3000		
	Clear Base T200-0001		Red T200-3001		
	Gold T200-4001		Pink T200-3002		

Application Field

ABS, acrylic glass (acrylic glass, plexiglass), PVC, pre-treated polyethylene (PE), Hard polypropylene (PP), Bright lacquered surface, SAN, polyamide (PA), PET, metal polycarbonate (PC), polystyrene (PS), paper and carton.

Since the above materials may be different in chemical structure or production method, it is necessary to test whether the ink is suitable before printing. Antistatic agents, release agents, and sliding additives may have a negative effect on adhesion, so they must be detected and removed before printing.

Shelf Life

Store at 21 degrees Celsius in the original packaging, unopened, it can be stored for 2 to 3 years and used as soon as possible within 12 months after opening.

Fine Cause ink color matching service:

Please provide Pantone color number or printed materials.

Additive:

- 1 Thinner – Before operation, adjust the applied ink to an appropriate viscosity
- 2 Retarder - The retarder's volatilization rate is slow, and the retarder is added to control the ink curing time. Note that adding too much will affect the adhesion of the ink.
- 3 **It is recommended to use 100VR-1170 ultra-drying when screen printing, in order to achieve a good printing effect.** Hardener-The hardener is added to the ink to increase the adhesion of the ink. **The 100VR-1433 is the standard hardener. The addition ratio is about 10%. During the printing process, the room temperature should not be lower than 15 degrees Celsius.** Avoid printing products in high humidity areas after printing. Multi-color printing needs to be completed within 36 hours.

Operation suggestions:

- 1 The T200 is suitable for all printing machines, steel plates and plastic heads on the market. The etching depth of the steel plate, the hardness of the glue head, the ink deployment, and the printing speed may all affect the printing effect. The PP and PE materials need to be pretreated first by flame treatment or corona discharge, mainly to ensure the adhesion of the ink. **It is recommended to pre-treat PE printing with a surface tension of at least 42 mN/m (Dynes/cm) It is recommended to pre-treat PP printing with a surface tension of at least 52 mN/m (Dynes/cm)**

Curing conditions:

At room temperature (21 °C), T 200 series ink can be dried in 30-35 seconds. If hardener is added, the ink will fully cure at room temperature in about 36 hours. To speed up the drying of the ink, it is recommended to use a hot air fan or infrared light.



▲ Metallic paint

End Products



▲ Metal



▲ Corn starch mug

▲ ABS



▲ Wood

Precautions:

For further safety, preservation, and environmental issues, please refer to the Material Safety Data Sheet (MSDS) website: <https://www.finecause.com/knowledges/knowledge3>

※Above color for reference only

T25
B系列



(Low Halogen)
Eco-friendly design

Application Field

Untreated or pre-treated Polyethylene (PE) and polypropylene (PP). Since the above materials may be different in chemical structure or production method, it is necessary to test whether the ink is suitable before printing. Antistatic agents, release agents, and sliding additives may have a negative effect on adhesion, so they must be detected and removed before printing.

Shelf Life

Stored in the original packaging at 21 degrees Celsius, unopened can be stored for 2 to 3 years, used as soon as possible within 12 months after opening.

Additives:

1. Thinner – Added before production, the ink can be adjusted to the appropriate printing viscosity.
2. Retarder – The retarder's volatilization rate is slow, and the retarder is added to control the ink drying time. Note that adding too much will affect the adhesion of the ink.
3. Hardener – The hardener is added to the ink to increase the adhesion of the ink.

100VR-1433 is a standard hardener, the addition ratio is about 10-20%.

Operation Suggestions:

The T25 series ink is suitable for all pad printing equipment. It should be noted that the depth of etching of the steel plate, the hardness of the glue head, the deployment of ink, and the speed of printing may all affect the printing effect.

Curing Conditions:

At room temperature (21 °C), T25 series ink can be completely dried in 2-3 minutes. If hardener is added, the ink will fully cure at room temperature in about 36 hours.

If you need to speed up the drying time of the ink, it is recommended to use a hot air fan or infrared light to speed up the drying speed of the ink, but please remember to allow the adhesion test after the product has cooled down.

End Products



Precautions

▲ PP eyeliner

▲ PP bucket

▲ PP cup

▲ PP bottle

▲ PE bottle

Ink Characteristics:

The high-gloss, physically dry pad printing ink has good mechanical and chemical resistance. The color of T25 ink is not easy to fade, resistance and occlusion. It can also achieve good oil resistance under certain conditions.

It is recommended to do product testing before production.

In some cases, it is recommended to wipe the PP treatment agent 100VR1425 on the material to remove dust and other impurities increase the adhesion of the ink.

Color Range:

This series contains 12 reference colors, which can be mixed with each other to produce a wide range of colors. The commonly used standard on the market is Pantone.

Fine Cause Color Matching Service:

Please provide Pantone color number or printed materials.

	White	T25-1001		Yellow	T25-2004		Violet	T25-5007
	Opaque white	T25-1002		Orange	T25-3002		Blue	T25-5008
	Black	T25-9001		Red	T25-3003		Green	T25-6000
	Opaque black	T25-9002		Red	T25-3004		Clear Base	T25-0001
	Yellow	T25-2003		Pink	T25-3005			

Screen Printing ink

110GK B series



(Low Halogen)
Eco-friendly design

Application Field

Glass, varnish surface, metal anode, electroplating, thermosetting plastic, poly thiamine (PA), polycarbonate (PC), pre-treated polyethylene (PE) and polypropylene (PP), polyurethane rubber (PU), hard PVC. Since the above materials may be different in chemical structure or production method, it is necessary to test whether the ink is suitable before printing. Antistatic agents, release agents, and sliding additives may have a negative effect on adhesion, so they must be detected and removed before printing.

Shelf Life

Stored in the original packaging at 21 degrees Celsius, unopened can be stored for 2 to 3 years, used as soon as possible within 12 months after opening.

Ink Characteristics:

It is a high-gloss, physically dry and chemically active two-liquid screen printing ink with good mechanochemical resistance and flexibility. The color of 110GK is good in light resistance and weather resistance, and has high shielding property. It is recommended to do product testing before production. The materials used comply with the regulations and restrictions of EEC Regulation EN71 (Toy Safety), Article 3 (Migration of Specific Elements) passed in December 1994.

Color Range:

This series contains 12 reference colors, which can be mixed with each other to produce a wide range of colors. The commonly used standard on the market is Pantone.

	White	110GK1096		Yellow	110GK2280		Violet	110GK5602
	Opaque white	100GK1100		Orange	110GK3735		Blue	110GK5581
	Black	110GK9068		Red	110GK3717		Green	110GK6471
	Clear base	110GK0069		Red	110GK3737		Gold	110GK4078
	Yellow	110GK2276		Pink	110GK3736		Silver	110GK4050

Fine Cause Color Matching Service:

Please provide Pantone color number or printed materials.

※Above colors only for reference

Additives:

- 1 Thinner – Added before production, the ink can be adjusted to the appropriate printing viscosity.
- 2 Retarder – The retarder's volatilization rate is slow, and the retarder is added to control the ink drying time. Note that adding too much will affect the adhesion of the ink.
- 3 Hardener – The hardener is added to the ink to increase the adhesion of the ink.
100VR1433 is the standard hardener. Adding ratio is about 10%-20%. 100VR1294 is a hardener for glass. Adding ratio is about 10%-20%.

Operation Suggestions:

- 1 110GK-B series ink can be used in all screen printing equipment on the market. The printing speed can reach 800-1600Pcs per hour.
- 2 PP and PE materials need to be pre-treated first by flame treatment or corona discharge, mainly to ensure the adhesion of ink.
It is recommended to pre-treat PE printing with a surface tension of at least 42 mN/m (Dynes/cm) It is recommended to pre-treat PP printing with a surface tension of at least 52 mN/m (Dynes/cm)

Curing Conditions:

The physical drying of 110GK-B series ink is through the volatilization of the solvent, about 15 minutes at room temperature, and then chemical drying by adding a hardener. The drying of the ink added with the hardener reached complete drying at room temperature in about 36 hours. Multi-color printing is recommended to use equipment that immediately dries, such as infrared drying and hot air systems.



▲ Metallic paint

▲ Metallic paint

▲ Metallic plated USB

▲ Aluminum

Precautions:

For further safety, preservation, and environmental issues, please refer to the Material Safety Data Sheet (MSDS)

Website: <https://www.finecause.com/knowledges/knowledge3>

T01-HF Mseries Pad Printing

RUCO Druckfarben – Taiwan Distributor

Ink – 2-component ink

T01-HF
M series
(low halogen)



(low halogen)
Eco-friendly design
No added fluorine,
bromine, iodine

Application Field

Glass, metal anode, ceramic, acrylic (acrylic), bright lacquered surface, thermosetting plastic, polyamide (PA), polycarbonate (PC), pre-treated polyethylene (PE), and polypropylene (PP), polyurethane rubber (PU).

Since the above materials may be different in chemical structure or production method, it is necessary to test whether the ink is suitable before printing. Antistatic agents, release agents, and sliding additives may have a negative effect on adhesion, so they must be detected and removed before printing.

Shelf Life

Stored in the original packaging at 21 degrees Celsius, unopened can be stored for 2 to 3 years, used as soon as possible within 12 months after opening.

Ink Characteristics:

It is a high-gloss, physically dry and chemically active pad printing ink with good mechanical and chemical resistance and flexibility.

T01-HF series is halogen-free (fluorine, bromine, iodine) ink and its color is light and weather resistant, and has high shielding properties. It is recommended to do product testing before production. The materials used comply with the regulations and restrictions of EEC Regulation EN71 (Toy Safety), Article 3 (Migration of Specific Elements) passed in December 1994.

Color Range:

This series contains 12 reference colors, which can be mixed with each other to produce a wide range of colors. The commonly used standard on the market is Pantone.

Fine Cause Color Matching Service:

Please provide Pantone color number or printed materials.

	White	T01HF1088		Yellow	T01HF2408		Violet	T01HF50103
	White	T01HF1047		Yellow	T01HF2409		Blue	T01HF50104
	Black	T01HF9053		Orange	T01HF30137			
	Black	T01HF9026		Red	T01HF30138			
	Clear base	T01HF0041		Pink	T01HF30139			

※Above colors only for reference

Additives:

1. Thinner – Added before production, the ink can be adjusted to the appropriate printing viscosity.
2. Retarder – The retarder's volatilization rate is slow, and the retarder is added to control the ink drying time. Note that adding too much will affect the adhesion of the ink.
3. Hardener – The hardener is added to the ink to increase the adhesion of the ink.
100VR-1433 is the standard hardener, the addition ratio is about 10-20%, 100VR-1294 is the glass hardener, the addition ratio is about 10-20%, the general baking temperature is 80~140°C 30 mins/ glass 180°C 30 minutes.

Operation Suggestions:

1. T01-HF B series ink can be used in all screen printing equipment on the market. The printing speed can reach 800-1600Pcs per hour.
2. PP and PE materials need to be pre-treated first by flame treatment or corona discharge, mainly to ensure the adhesion of ink.
It is recommended to pre-treat PE printing with a surface tension of at least 42 mN/m (Dynes/cm) It is recommended to pre-treat PP printing with a surface tension of at least 52 mN/m (Dynes/cm)

Curing Conditions:

At room temperature (21 °C), T01-HF B series ink is controlled to dry within 5 minutes. The drying of the ink added with the hardener reached complete drying at room temperature in about 36 hours. To speed up the drying of the ink, it is recommended to use a hot air fan or infrared light.

End Products



▲ Glass cup ▲ Ceramic mug ▲ Metal ▲ Glass cosmetic jar

Precautions:

For further safety, preservation, and environmental issues, please refer to the Material Safety Data Sheet (MSDS)
Website: <https://www.finecause.com/knowledges/knowledge3>

– 1-component ink

920UV
G series



(Low Halogen)
Eco-friendly design

Application Field

Polyethylene (PE) and polypropylene (PP), PVC, other plastic types of pretreatment substrates, paper and cartons. Since the above materials may be different in chemical structure or production method, it is necessary to test whether the ink is suitable before printing. Antistatic agents, release agents, and sliding additives may have a negative effect on adhesion, so they must be detected and removed before printing.

Shelf Life

Stored in the original packaging at 21 degrees Celsius, unopened can be stored for 2 to 3 years, used as soon as possible within 12 months after opening.

Ink

Characteristics:

It is a series of high-gloss UV inks, which have strong reactivity. Even under the high-speed printing of the machine, they can maintain good curing and adhesion. 920UV series, without adding toxic substances and solvents, this series of inks show good solvent resistance and water resistance after 12 hours, suitable for extreme climatic conditions (temperature > 28 degrees C). It is recommended to do product testing before

Color Range:

This series contains 12 reference colors, which can be mixed with each other to produce a wide range of colors. The commonly used standard on the market is Pantone.

	White	920UV-1119		Orange	920UV-30226		Green	920UV-6883
	Black	920UV-9197		Red	920UV-30227		Blue	920UV-9197
	Clear base	920UV-0007		Red	920UV-30228			
	Yellow	920UV-2606		Pink	920UV-30229			
	Yellow	920UV-2607		Violet	920UV-50315			

※Above colors only for reference

Fine Cause Color Matching Service

Please provide Pantone color number or printed materials.

Additives

1 Thinner - Added before production, the ink can be adjusted to the appropriate printing viscosity via the addition of thinner.

Reduce ink consistency-UV special thinner 920UV-0014 (maximum addition amount 2-5%)

Increase curing-UV special active diluent 920UV-0010 (maximum addition amount 2-5%)

2 Retarder - The retarder's volatilization rate is slow, and the retarder is added to control the ink drying time. Note that adding too much will affect the adhesion of the ink.

3 Hardener - The hardener is added to the ink to increase the adhesion of the ink.

100VR1259 hardener, add up to 2% (printing needs at room temperature 21 °C, within 12 hours).

Operation Suggestions:

1 920UV series ink can be used in all screen printing machines on the market.

2 Pre-treatment-PP and PE materials must be pre-treated. The method is flame treatment or corona discharge. Mainly to ensure the adhesion of ink.

It is recommended to pre-treat PE printing with a surface tension of at least 42mN/m (Dynes/cm). It is recommended to pre-treat PP printing with a surface tension of at least 52mN/m (Dynes/cm).

Curing Conditions:

1. All colors of 920UV series can be cured by using medium pressure mercury vapor lamp (at least 160W/cm).

2. The best energy output is 250-300 mJ/cm². 12 hours after UV curing is the curing stage, after which the ink film will be completely cured.

3. However, it should be noted that low radiation intensity, excessive machine speed or excessive film thickness may affect curing and adhesion.

4. Pay attention to the uncured printed matter, which is hazardous waste, which should be cured before processing.

End Products



▲ PP bucket



▲ PP cup



▲ PE bottle



▲ PP bottle

Precautions:

UV ink may cause irritation and may increase skin sensitivity and may cause allergies, so it is strongly recommended to use disposable gloves and goggles.

For further safety, preservation, and environmental issues, please refer to the Material Safety Data Sheet (MSDS).

Website: <https://www.finecause.com/knowledges/knowledge3>

component ink

937UV LED M series



(low halogen)
Eco-friendly design
No added acute toxic materials

Application Field

Glass, Metal, Ceramics, etc.

Since the above materials may be different in

chemical structure or production method, it is necessary to test whether the ink is suitable before printing. Antistatic agents, release agents, and sliding additives may have a negative effect on adhesion, so they must be detected and removed before printing.

Shelf Life

Stored in the original packaging at 21 degrees Celsius, unopened can be stored for 2 to 3 years, used as soon as possible within 12 months after opening.

Ink Characteristics: After the LED-UV is cured, no additional heat treatment is required. The 937UV-LED ink series is suitable for multi-color printing, suitable for chemical resistance and cosmetic agents. Compared with traditional UV-curable inks, it can achieve the best Adhesion and scratch resistance. It takes about 72 hours (stored at room temperature) to achieve water resistance and dishwasher, ice water or frost resistance performance. If the storage temperature is lower than 21 °C, it will prolong the setting time.

Color Range:

This series contains 10 reference colors, which can be mixed with each other to produce a wide range of colors. The commonly used standard on the market is Pantone.

Fine Cause Color Matching Service:

Please provide Pantone color number or printed materials.

Precautions:

For further safety, preservation, and environmental issues, please refer to the Material Safety Data Sheet (MSDS)

Website: www.finecause.com.tw/support.php?catId=12

	White	937UV1055LED		Orange	937UV3359LED
	Black	937UV9074LED		Red	937UV3360LED
	Yellow	937UV2185LED		Pink	937UV3361LED
	Yellow	937UV2186LED		Violet	937UV5416LED
	Blue	937UV5417LED		Green	937UV6158LED

※Above colors only for reference

Additives:

1. Thinner - Added before production, the ink can be adjusted to the appropriate printing viscosity via the addition of thinner.

Reduce viscosity, UV special thinner-920UV-0014LED (maximum addition amount 2-5%)

Increase curing, ultraviolet special active thinner-937UV-0010LED (maximum addition amount 4-8%)

Operation Suggestions:

1. Many glass containers have a cold end coating (CEC) on the surface to improve the scratch resistance of the surface. Therefore, in order to obtain good ink adhesion on the glass, the glass surface needs to be treated with flame, Pyrosil, and UVITRO. According to different hot and cold end coatings, it should be tested before production.

2. 937UV LED ink series is suitable for all screen printing equipment on the market.

Curing Conditions:

1. Suitable for LED-UV curing lamps, the intensity (radiation of ultraviolet light) is at least 8W/cm² and the wavelength is 395nm.

2. With proper LED-UV curing, there is no need for additional final curing using conventional UV.

3. It should be noted that low radiation intensity, high machine speed, or excessive film thickness may negatively affect ink curing and adhesion.

4. The 937UV-LED series is highly reactive and avoids direct sunlight.



▲ LED-UV curing lamp, easy to use and super convenient to install



▲ Ceramic mug

▲ Glass



▲ Glass jar



▲ Metal

RUACO inks 937UV LED M series

Website: <https://www.finecause.com/products/category7>