



UV-LED 1-01 Series LED UV Curable Offset Ink

【Product description】

This UV curable offset ink is mainly composed of UV-curable acrylic resin, photoinitiator, active diluent, pigments, filler and additives. Without solvents and volatile raw materials which has stable printability and fast curing speed, vivid ink color, high saturation, good adhesion, and excellent aging resistance.

【Characteristics】

- ❖ Good printability, suitable for UV LED business printing.
- ❖ Fast UV curing, good adhesion, abrasion resistance, scratch resistant and high toughness.
- ❖ Good water and ink balance, good tone reproduction
- ❖ Safe and environmentally friendly, free of petroleum solvent, non-volatile products.

Using low-irritating monomer raw materials effectively reduce the irritation to the skin.

【Technical parameter】

| Index \ Product | UV-LED 1301 YELLOW | UV-LED 1401 MAGENTA | UV-LED 1501 CYAN | UV-LED 1101 BLACK | UV-LED 1103 Ultra BLACK | UV-LED 1201 WHITE | UV-LED 1203 Ultra WHITE | REMARKS |
|-----------------|-------------------------------------------------------|---------------------|------------------|-------------------|-------------------------|-------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Tackiness | 10-12 | 11-13 | 11-13 | 12-14 | 12-14 | 8-11 | 8-11 | Viscometer, 400rpm, 32°C |
| Viscosity | 25-80Pa.s | | | | | | | Falling rod viscometer(25°C) |
| Curing | Suitable for curing 365nm and 385nm LED light sources | | | | | | | |
| Adhesion | Gold/ silver cardboard | 5 | 5 | 5 | 5 | 5 | 5 | 0-5, poor and excellent The substrate needs to be surface treated, and the surface tension reaches 38 dyne/cm and above. |
| | PET | 5 | 5 | 5 | 5 | 5 | 5 | |
| | PVC | 5 | 4-5 | 5 | 4-5 | 4-5 | 5 | |

The above data comes from the laboratory and is for reference only.



【User's guidance】

- ❖ Viscosity adjustment: The UV curing ink ideally balanced to adjust various printing properties. Used directly. If the temperature is low or the strength of the substrate is poor, you can add UV special ink oil 1-3% to reduce the viscosity, excessive addition may make the ink in printing fly ink, affect the drying of the ink, etc.
- ❖ Post-processing: If gluing, filming and bronzing process is required after printing, please conduct a small-scale test first (please select the appropriate glue, film and bronzing materials during the test), and test according to the requirements of the post-processing, then print large scale after all the requirements are met.
- ❖ Adhesion: The ink exhibits different adhesion on the surface of the printed material due to various factors, such as the material, surface structure, surface condition, and surface tension of the printed material. Thus, users are particularly reminded to confirm the adhesion of the ink on the printing material by the required test method before the formal printing, and then select the corresponding product according to the need.
- ❖ Safety: UV ink is irritating, avoid prolonged exposure to skin as it may cause skin allergies.
- ❖ Storage: Store in a cool and dark environment, and the storage temperature is below 25°C.

【Instructions】

- ❖ UV special ink adjustment oil: Reduce the viscosity of ink, while improving the fluidity, the general amount of adding should be less than or equal to 3%, excessive adding may make ink in printing fly ink, affect the drying of ink.
- ❖ UV special adhesive: Reduce the viscosity of ink without changing the fluidity, the general amount of adding should be less than or equal to 3%, excessive adding may make the ink in printing fly ink, affect the drying of ink.
- ❖ UV enhancer: in the early stage of non-press processing, after adding the right amount can improve the smoothness and scratch resistance of the ink, the general amount of adding should be less than or equal to 2%, excessive adding may make the ink transfer become poor, printing products heap ink abnormality.



【Precautions】

Due to different substrates and processes, please test the adaptability of the product according to your specific requirements before batch trial.

【Packaging and shelf life】

- ❖ Package and packing specification: metal can, net weight 1kg
- ❖ The shelf life is 1 year.

【Disclaimer】

The data shown in this document is based on actual production and test result generated within our company. Above data is only for reference and does not bear any legal guarantee responsibilities. Whether actual ink performance can meet user's requirement depends on application conditions and substrate etc. We suggest that users should access whether current production conditions meet the application requirement of each product before printing. Since we cannot control the actual application and storage conditions, we cannot guarantee the final product performance. All product sales subject to our standard sales terms and conditions.