UV/LED--General ink

【Product Introduction】

This product is UV/LED light-cured screen printing general-purpose ink, suitable for paper, coated paper; painted surface; PC, PMMA, ABS, PS, AS; treated PE, PET, PP, etc.;

【Features】

- ❖ Fast curing speed, vivid color, high gloss;
- ❖ Good opacity and adhesion;
- ❖ High surface hardness, excellent light resistance, abrasion resistance and scratch resistance;
- ❖ High-efficiency, energy-saving, environmental protection, LED light curing is more than 90% energy-saving than UV light;
- ❖ Suitable for general printing substrate and all kinds of plastic products; it can be cured by special LED light or general UV mercury light source.

【Environmental information】

Comply with Bauhinia Screen Ink Class A standard. Meet the volatile organic compound limit requirements in GB38507-2020. If you have special requirements, please consult our sales staff.

【Performance parameters】

Item	Appearance	Viscosity (25℃)	Fineness	Defoaming	Leveling	Adhesion
Index	Viscous liquid	4500±300mpa.s	≤6um	good	good	100%
Item	Light fastness	Gloss (60° gloss meter)	Flexibility	Light curing energy	Curing speed	Suggested mesh
Index	Level 8	80±5°	Good, bending resistance	2000≥mW/c ㎡	≥12M/min	350-450 mesh

【User's guidance】

- ❖ Fully stirred the ink before use, to avoid long-term delamination affecting the printing effect;
- ❖ Number of meshes: 350-450 mesh is recommended;

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- Scraper hardness: 75-85 degree squeegee is recommended;
- Ink curing process: UV-LED light source---single lamp bead power 2-4W, quantity 300~600 (depending on the curing area), effective length of light source 400~800mm, light intensity 2.8-4w/ c ㎡ ,The height from the substrate is 0.8-1.0cm; due to the consideration of the heating performance of the substrate, it is recommended to use a low-temperature water-cooled curing machine or a water-cooled LED light source;
- If you use UV mercury lamp for curing, it is recommended that the UV curing machine is 2×5KW or more, and the UV curing energy is set at 150 ≥mj/c ㎡ to ensure full curing;
- Additives: Bauhinia LED-001 diluent can be used to reduce ink viscosity (within 10%)

【Precautions】

- Ensure that the substrate is clean before printing, otherwise it will affect the adhesion or the smoothness of the ink;
- The printing workshop should avoid direct sunlight or strong light, and cover the ink in time after opening the cover, otherwise it will cause accidental curing or affect the printing performance. The yellow light is safety light;
- Due to the diversity of customer requirements, the printing workshop must simulate actual requirements, trial production in small scale, and large-scale production after confirmation; in addition, the printing effect of this product are closely related to the number of screens, the number of printing lines, the thickness of photosensitive adhesive, and UV curing energy and substrate type, and should be fully tested before printing;
- The ink may have a certain irritation effect on sensitive skin, please pay attention to protection; if the skin comes in contact, please wash with soapy water or water in time; if you accidentally contact the eyes, please rinse with plenty of water immediately, and promptly seek medical attention. Please change it in time when the ink sticks to the clothes;
- Do not mix with inks of different series or other brands to avoid adverse reactions;
- Stored in a cool, dry and dark place where is about 25℃, the shelf life is 1 year;

❖ Attached: UV mercury lamp and UV-LED lamp comparison demonstration table (for reference only)

Comparison demonstration table of UV mercury lamp and UV-LED lamp

Types	UV-mercury lamp	UV-LED lamp
length	800～1000mm (adjustable)	800～1200mm (adjustable)
Emission spectrum	Broad: 205～445nm	Concentration: 395nm
Applicability	Cannot be applied to heat sensitive materials	Almost all materials
life	≤1000 hours	≥20000 hours
Light output attenuation	Severe attenuation	Almost no attenuation
Ozone production	have	none
Light source thermal effect	High fever	Low
Start up	Slow start, after shutting down, it needs to cool down completely before starting	Can be started instantly
Cool down	Air or water	Air or water
Light source volume (length × width × height)	Large size (3m×1.2m×1.2m)	Very small size (1m×0.2m×0.2m)
Light source equipment	Transformers, lamps, capacitors, fans	Light source module, cooling system
Maintenance	Difficult to clean	Easy to clean
Electric power	Lamp power: 8kw×3=24kw Motor power: 4kw General model: 10～15kw Larger model: 20～36kw	LED power: 2kw cooling motor power: 2kw total power 4kw

【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.

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