

H97 Series — Nylon Fabric Ink



TECHNICAL DATA SHEET

1. Product Description

H97 is a flexible solvent-based ink specially developed for printing on nylon fabrics and synthetic textile materials. It provides excellent adhesion, flexibility, and abrasion resistance while maintaining good color stability after repeated use.

The ink film offers durable printing performance on textile surfaces exposed to bending, stretching, and daily wear, making it suitable for functional fabrics and outdoor products.

2. Recommended Substrates & Applications

Recommended for nylon fabrics and synthetic textile materials requiring strong adhesion, flexibility, and abrasion resistance.

Typical applications include nylon bags, outdoor equipment, sportswear accessories, luggage, protective fabrics, and textile products requiring durable printed graphics.

3. Key Features

- Excellent adhesion on nylon fabric substrates
- Flexible ink film with good bending resistance
- Outstanding abrasion resistance for textile applications
- Smooth printing performance on fabric surfaces
- Suitable for screen printing applications

4. Printing Instructions

1. Remove dust, oil, finishing agents, and other contaminants before printing.
2. Stir ink thoroughly before use and adjust viscosity according to printing conditions.
3. Select suitable thinner according to temperature and printing speed.
4. Recommended screen mesh: 100–150T
5. Allow the printed ink film to fully cure before final performance evaluation. Air dry for 24 hours at room temperature, or oven cure at 80°C for 30 minutes.

5. Precautions & Storage

1. Always conduct a production trial before mass printing. Adhesion, drying, appearance, and resistance may vary with substrate grade, surface treatment, additives, and molding conditions.
2. Typical thinner addition is 20–30%. Adjust viscosity according to actual printing conditions and the working environment.
3. Drying time varies with substrate, ink-film thickness, temperature, and ventilation. Confirm the appropriate drying conditions before production.
4. Flammable product. Keep the container tightly closed and store in a cool, well-ventilated area away from heat, sparks, and open flames.
5. Use appropriate personal protective equipment. Avoid skin and eye contact. If the product enters the eyes, rinse immediately with plenty of water and seek medical attention.
6. Shelf life is 12 months from the date of manufacture in unopened original packaging. Re-test suitability before using expired material.

6. Technical Reference Data

Test Item	Result	Test Method / Condition
Ink Fineness	$\leq 12 \mu\text{m}$	Grind gauge
Dry-Film Gloss	$\geq 65 \text{ GU}$	60° gloss meter
Surface Drying	Hot air: 40–60°C (Recommended: 50°C)	Reference drying condition
Full Drying	Air dry for 24 hours, or oven cure at 80°C for 30 minutes	Reference drying condition
Adhesion	Excellent adhesion	3M tape peel
Flexibility	No cracking	Fabric bending test
Water Resistance	No visible change	Tap-water immersion at 20°C for
Abrasion Resistance	No substrate exposure	500 g load; 500 double rubs with an abrasive eraser

Note: Performance data is based on internal laboratory tests and may vary depending on substrate and application conditions. Please conduct a trial test before mass production.

7. Compliance Information

Standard colors in this series can be supplied to meet applicable RoHS, REACH, PAHs, and EN 71-3 requirements. Confirm the required regulation, test method, color, and market before ordering; supporting test reports are available for selected products upon request.

8. Important Notice

The information in this document is based on internal reference testing and is provided as technical guidance only. Because substrate grades, printing conditions, film thickness, drying, and end-use requirements vary, users must verify suitability through their own trials before production.