UVS-1000 Series UV Screen Overprint Varnish
Technology Data Sheet

1. Product Overview

Versatile UV screen overprint varnish formulated for flat-bed and cylinder screen presses. Offers rapid curing response, exceptional film clarity, brilliant specular gloss, and strong scuff/blocking resistance. Ideal for spot varnishing on cigarette packaging, wine labels, and luxury rigid gift boxes.

2. Product Features

- **High Specular Gloss & Clarity:** Full crystal-clear film with mirror-like gloss;
- **Fast UV Curing Speed:** High photochemical reactivity, running at 2,500–4,000 sheets/hour;
- **Outstanding Anti-Blocking:** Superior hardness and slip, preventing blocking during heavy stacking;
- **Excellent Post-Press Performance:** Flexible film resisting die-cut chipping; select grades are hot foil stampable;
- **Eco-Friendly & Low Odor:** Low volatile content, compliant with green packaging norms.

3. Suitable Substrates

Gold/silver board, SBS ivory board, coated art paper, BOPP/PET laminated boards.

4. Technical Specifications

Property	Unit	Typical Value	Test Method / Notes
Appearance & Color	-	Light yellow transparent liquid	Visual inspection
Viscosity	s	30–60	Zahn Cup #3, 30°C
Solid Content	%	≥97	GB/T 33374-2016
Gloss (60°)	GU	85–90	60° angle, GB/T 13217.2-2024

5. Application Guidelines

Ink Preparation	Stir thoroughly before use.
Plate / Cylinder Specs	300–380 mesh count.
Dilution Ratio	Use dedicated UV thinner.
Press Viscosity	Ready-to-use.
Press Speed	2,500–4,000 sheets/hour.
Drying Method	High-pressure mercury UV lamp system.
Equipment Cleaning	Clean with ethyl acetate or screen wash.
Application Note	Verify inter-coat adhesion with base inks prior to commercial runs.

6. Regulatory & Safety

Regulatory Compliance	Complies with RoHS and REACH (SVHC) directives.
Food Contact Statement	Formulated for non-direct food contact outer packaging only. For specific food-contact migration compliance, please contact HCOLOR technical department for dedicated project evaluation.
Usage Note	
Safety Data Sheet (SDS)	Available upon customer request.
User Responsibility	Users must independently verify regulatory compliance, performance, and fitness for intended purpose under actual operational conditions.

7. Packaging & Storage

Standard Packaging	20 kg / 25 kg plastic pails; 1,000 kg IBC containers (custom packaging available upon request).
Storage Conditions	Store strictly protected from light in tightly sealed containers. Keep in a dry, cool, and well-ventilated warehouse at 5–25°C, away from fire, heat sources, and strong oxidizers. Strictly avoid direct exposure to sunlight and workshop fluorescent lighting to prevent dark polymerization.
Shelf Life	12 months from production date in unopened original containers.
Post-Opening Care	Reseal immediately and tightly after dispensing; recommended to use within 6 months.

8. Typical Product Grades

Product Code	Key Features	Suitable Substrates	Target Applications
UVS-1182A	High gloss, superior leveling, excellent scratch resistance	Paper substrates	Cigarette packaging, liquor cartons
UVS-1061C	High gloss, hot foil stampable	Paper substrates	Foil-stamped luxury gift cartons
UVS-1061C9	High gloss, hot foil stampable, good slip	Paper substrates	Cigarette packaging, luxury gift boxes
UVS-1108B4	High transparency, fast curing	Paper & film substrates	High-speed screen printing

1. Baseline Platforms & Customization: The products listed above are core baseline platforms proven through extensive commercial mass production. To meet specific press speeds (e.g., ultra-high-speed inline coating), substrate absorbency variations, or demanding rub/crease-crack resistance requirements, HCOLOR provides tailored viscosity adjustments, customized additive packages, and bespoke functional performance development.

2. Specialty Process Integration: If specialized finishes such as drip-off / drip-relief combination effects or tactile matte finishes are required, please contact HCOLOR technical support for a comprehensive turnkey printing formulation.

9. Disclaimer

1. The data are typical values intended for product selection and technical reference only. Unless otherwise agreed in writing, they do not constitute guaranteed specifications.

2. The information contained herein is based on our current knowledge and experience and is provided in good faith for general application guidance only. It does not constitute a legal warranty, guarantee, or binding technical specification. Users are strictly responsible for evaluating and confirming product suitability, process compatibility, and commercial usability under their actual operating conditions and production equipment prior to commercial use.