UVS-1000 Series UV Screen Snowflake Effect Ink
Technology Data Sheet

1. Product Overview

Decorative UV screen printing snowflake effect ink formulated for flat-bed and cylinder screen presses. Forms distinctive crystalline ice-flower textures upon UV curing, featuring rich 3D optical depth, high adhesion, and exceptional scratch resistance. Highly popular on premium cigarette cartons, liquor packaging, and creative luxury gift boxes.

2. Product Features

- **Crystalline Snowflake Texture:** Elegant, distinctive ice-flower crystal grain with 3D optical depth;
- **Strong Substrate Bonding:** Outstanding adhesion on gold/silver card, SBS, PET, and BOPP;
- **Tough Abrasion Resistance:** Resists scratching and chipping during pallet stacking;
- **Screen Printability:** Smooth flake passage through mesh with wide operating tolerance;
- **Eco-Friendly Low Odor:** Rapid cure response and minimal odor.

3. Suitable Substrates

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

4. Technical Specifications

Property	Unit	Typical Value	Test Method / Notes
Appearance & Color	-	Light reddish liquid	Visual inspection
Viscosity	s	Pseudoplastic state	Good thixotropy
Solid Content	%	≥97	GB/T 33374-2016
Gloss (60°)	GU	5–30	60° angle, GB/T 13217.2-2024

5. Application Guidelines

Ink Preparation	Additives may stratify over time; stir thoroughly before use.
Plate / Cylinder Specs	250–420 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	Snowflake grain size varies with ink deposit and mesh count; calibrate with proof prints.

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-1968E	Fine delicate snowflake pattern, good printability	Paper substrates	Cigarette packaging, paper printing
UVS-1676A	High adhesion, excellent scuff resistance	BOPP matte film	Liquor cartons, luxury gift boxes
UVS-1712A	High adhesion, excellent scuff resistance	PET gloss film	Liquor cartons, luxury gift boxes
UVS-1476B1	Coarse transparent snowflake effect, strong tactile feel	Paper substrates	Cigarette packaging, gift boxes

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.