UVS-1000 Series UV Screen Wrinkle Texture Ink
Technical Data Sheet

1. Product Overview

Distinctive decorative UV screen printing texture ink that undergoes differential surface photopolymerization to form an intricate, uniform wrinkled/crinkled tactile pattern. Exhibits excellent surface hardness, scratch resistance, and low gloss. Widely applied to cigarette cartons, high-end liquor packaging, and cosmetic boutique gift boxes.

2. Product Features

- **Uniform Wrinkled Pattern:** Natural, fine wrinkle texture with rich tactile hand feel;
- **Low Gloss Diffuse Surface:** Ultra-matte finish eliminating surface glare;
- **High Film Hardness & Scuff Resistance:** Resists scratching and scuffing during assembly and stacking;
- **Screen Printability:** Consistent wrinkle formation across full sheets under calibrated UV conditions;
- **Eco-Friendly:** Low odor and minimal volatiles.

3. Suitable Substrates

Gold/silver board, SBS ivory board, coated art paper.

4. Technical Specifications

Property	Unit	Typical Value	Test Method / Notes
Appearance & Color	-	Light yellow liquid	Visual inspection
Viscosity	s	1300–2000	Rotational viscometer
Solid Content	%	≥97	GB/T 33374-2016
Gloss (60°)	GU	10–40	60° angle, GB/T 13217.2-2024

5. Application Guidelines

Ink Preparation	Stir thoroughly before use.
Plate / Cylinder Specs	150–250 mesh count.
Dilution Ratio	Use dedicated UV thinner.
Press Viscosity	Ready-to-use.
Press Speed	2,000–3,000 sheets/hour.
Drying Method	Dual UV curing process (e.g., preliminary low-energy UV lamps for wrinkle triggering followed by high-pressure mercury lamps for full cure).
Equipment Cleaning	Clean with ethyl acetate or dedicated screen wash.
Application Note	Wrinkle texture scale is sensitive to ink film thickness and UV spectrum balance; proof prior to mass run.

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-1046	Fine wrinkle texture, good adhesion	Paper substrates	Liquor cartons, luxury gift boxes
UVS-1876H3	Medium-coarse wrinkle texture, high scratch resistance	Paper substrates	Cigarette packaging, liquor 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.